OUTLINE OF A METAPHYSICS

BY

FRANKLIN J. MATCHETTE

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THE ABSOLUTE-RELATIVE THEORY

BY
FRANKLIN J. MATCHETTE

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To my Wife
Nell

FOREWORD

THIS LITTLE book is the work of one who, though not an academic professional, loved philosophy for its own sake. Not couched in the technical jargon of the schools, it yet contains more truth than many of the writings of the teachers of philosophy. Here is one who, untainted by the over-sophistication of the professionals, goes with a refreshing and wholehearted naturalness to philosophy's original problem. In his general doctrine of Polarity he has doubtless made a contribution of high value. Certain surface objections will occur to the academician, probably leading him to undervalue the work; some of these at least could well have been met by the author, during his lifetime, if he had had them pointed out by colleagues. But even so, this small volume contains, I believe, suggestions of very distinctive worth for those who are seeking a world-view.

WILMON H. SHELDON

Yale University

INTRODUCTION

Philosophy has always shown a tendency to degenerate into a monopoly of the professional class. Thus it has been threatened with the loss of its basis in the common experiences of all mankind. Philosophy had its origin in man's interest in his world. But being overtaken with the immensity of its proper task, philosophy became discouraged and skeptical, and constantly narrowed its field. Its compass became cramped. Ceasing to roam the cosmos, philosophers restricted their vision to themselves, then to their knowing faculty, and finally to the question whether valid knowledge was possible at all. In this state of bankruptcy much of modern thought languishes.

Perhaps it is the fate of all professionals to be devoted to minute problems of the restricted domain in which they are expert. The detached observer describes their doings as being technical, and lets them go at that. The common man, therefore, whose intuitive outlook remains broad and wholesome and heroic, reacts to the mere mention of metaphysics with a shrug; philosophers cut such queer figures in the world. Their announced purpose is the accumulation of wisdom, but they seem so unwise in everything other people care about. They know their way around library corridors but nowhere else. Thus, in popular estimation, philosophers are relegated to classrooms and their writings to scholarly jour-

nals to be read only by their peers who are mainly intent on refuting them. Business men are suspicious of philosophers in business, politicians scorn them in politics. They are too theoretical, it is said, and theories seldom work.

Such distrust, unfortunately, is well founded. Inasmuch as any man is a human being before he is a philosopher, a thinker might justifiably be required to validate his right to think by showing some capacity to succeed in the practical affairs of humanity. One might be expected to know the world before knowing all about it. This fundamental pragmatism must test the truth of any philosopher's intellectual views. Philosophy represents no complete detachment from life, as all living men encounter it, but consists instead of a deeper penetration of it. One can never get to the center of the earth by soaring to the clouds. Activity and decision are the very stuff of experience. Philosophy surpasses ordinary interests, not by repudiating them, but by integrating them into a total grasp and vision. To ask, as does Bertrand Russell, why existence should be preferred to non-existence, is no philosophical query; the question is the complete negation of all human thought. Existence is here to stay. Existence is no matter of choice or argument. It is the fact any philosophy must accept, humbly and gladly. Thought may be thought about thought; but to the extent that it is legitimate, it is thought about existence.

The author of this volume was privileged by fortune, or condemned by fate, to be a business man. He was born poor. Circumstances did not afford him the luxury of a higher academic education. This deprivation occasioned in him no regrets, and incited no envy

of those luckier than he. His native state of Wisconsin stretched before him as ample field for endeavor, and the Universe was just as much his to contemplate as if he surveyed it from a university window. Moreover he discerned no reason in the benevolence of Providence why both jobs could not be pursued concurrently. There are plenty of leisure moments in the busiest man's life and if Mr. Matchette chose to spend them pursuing the Absolute rather than pursuing golf balls, that in no wise interfered with his work.

Notable success in temporal pursuits eventually gave Mr. Matchette opportunity in his later years to systematize his random meditations. All his views, however, had been generated long before, and his final studies consisted in arranging notes he had forged in the heat and hurry of a strenuous and active career. The sense of conflict and tension which pervades the chapters of this book had been imparted to them by years of tussle in patent courts and manufacturing establishments. Polarity he could fervently declare to be the essence of the cosmos, for he had found it to rule the business world.

Born in 1863 in a Wisconsin village, Mr. Matchette tried banking and real estate before he entered the field of hotel operation, a field that contained him throughout his life. At the age of 30 he was the proprietor of a Milwaukee hotel, which soon became prominent in that section of the country. But Mr. Matchette was never content merely to make money. He designed many improvements in hotel management and introduced new methods which were soon copied and have remained standard in the industry. An innate talent for the recognition and solution of problems led

him to invent and develop one of the earliest vacuum cleaners. On this instrument, especially in its application to hotel use, he eventually owned 24 patents, many basic, his own inventions being manufactured by the American Air Cleaning Company, which he founded and controlled.

When the Pennsylvania Railroad tunneled its way into New York City, Mr. Matchette quickly perceived the tremendous prospects for a hotel near its terminal. The result of his enterprise was the Pennsylvania Hotel, now the Hotel Statler, which in its time was the largest hotel ever constructed by man. Once in New York, he entered the building field, choosing for his site the two corners of Fifth Avenue and 63rd Street. In one of these apartment buildings he resided for many years, occupying the pent-house duplex, a venture in magnificence in its day.

Mr. Matchette pioneered widely in an almost unrelated field, that of agricultural bacteriology. His explorations here brought vast benefit to the nation's farmers as well as considerable profit to himself. Though in no technical sense a bacteriologist, he devised and patented a means for the mass propagation of nitrogen-fixing bacteria needed by leguminous plants. This business continues to flourish under the name of Nitragin Company.

During the 1930s Mr. Matchette gradually retired from business, to the extent that any one with his keen mind and active disposition could retire. At any rate he spent most of his time at home, voraciously devouring books withheld from him in his youth, with an appetite whetted by age and denial. From time to time he engaged collaborators or consultants, men for the most part who were young in years but venerable under

the weight of academic degrees. Together, we would discuss the problems of philosophy. Anyone who participated in those sessions will forever remember them: the testings and the clashes where more than a mere theory seemed to hang on the outcome. For, to Mr. Matchette, philosophy involved more than the reflections of man's mind; it had to incarnate the stirrings and the yearnings of his heart.

Likely most anything can happen in a Fifth Avenue apartment. But no writer of fiction or romance, chasing clues for inspiration on that corner of fashion and intrigue 15 stories below, would ever have imagined what was taking place high above the street: a retired man who had overcome the world in its mundane phase wrestling with it in its cosmic and eternal aspect. Despite occasional assaults, none of Mr. Matchette's confreres ever altered his convictions or dislodged him from a position won through his personal encounters with reality and occupied against storms more severe than verbal.

Saddened by the death of his wife, for in marriage and domestic life he had been eminently successful too, Mr. Matchette was devoutly convinced of the comfort of the Absolute. Through these discussions, however, he was frequently prevailed upon to adopt the traditional vocabulary of the philosophical schools and to substitute conventional terms for those of his own devising. Yet sometimes he was adamant even on the score of language, and many of his own linguistic inventions persisted to the end. This the reader will discover for himself.

Out of such a consuming devotion grew the plan for a perpetual endowment to carry on the quest: the

Franklin J. Matchette Foundation, incorporated under the laws of the State of New York according to the provisions of his will.

Mr. Matchette died on February 23, 1943.

As his nephew and co-worker I take both pleasure and pride in offering this book to the public.

William H. Matchette

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CHAPTER ONE

EXPERIENCE AND DUALITY

THE ENTIRE vast panorama of thought is, in a certain sense, a quest for constancy. From the earliest far flung imaginings of the Seven Sages through the contemporary reflections of modern philosophy in a multitude of forms, this has been the enduring perennial quest: the search for the persistent and unchanging against the evanescent and transitory.

Such a quest must transcend the world of sense. This world, this realm of transiency, cannot provide such constancy. The physical sense of the world is precisely a domain of precariousness, of contingency. These are the generic traits of the world of sense, the pervasive characteristics of the physical universe in which we live. Within these limits, constancy, fixedness and permanence are only relative. Within these limits lies the given subject matter of all inquiry. Here, within such a subject matter can distinctions be made; from such a setting may inferences be drawn.

The restless probings of the mind of man have pushed the search for constancy into theodicy and metaphysics.

The Greek knew and felt with horror the shifting, swerving of the world of sense beneath his feet, the

tragic and horrendous precariousness of his immediate world. Herein is the sense of the Appolonian Gods: the fixed, defiant citadel unmoved by the tides and flux of sense. The same impulse which brought the eternal Olympians into being to transform the horror and absurdity of so precarious a human existence into a theodicy with which the Greek could live, achieves a metaphysically transcendent conquest of the realm of sense, transforming its chaos and indeterminacy into order and determinateness through the discovery of an order which is Absolute.

Here, then is the crux and core of the perennial quest: given this world, this world of physical occurrences, given this inevitable initiating situation out of which all inquiry must emerge, is it possible to discover within it distinctions which will warrant the transcendent leap beyond this setting into the ". . . clear Athenian sun. . .", into a realm of fixity, eternality and necessity, free from the limitations and strictures which are intrinsic to this realm of sense?

Conceive the analysis of an object unreachably immersed in turbulent and unclear waters. Vision is our only recourse and so we attempt to minimize the turbulence and clear the water; to render less obstructed and confused our vision of the object. There is a limit. Meticulously, some turbulence is ever present, some impurity persists. Ultimately, no matter how refined our procedures, our very instruments and techniques themselves introduce small inevitable turbulences and impurities. We cannot, in a final sense, observe without disturbing the observed; the water cannot be perfectly still, perfectly clear.

Nor can such vision be certain and assured. It must

be probable and venturesome—it is committed to an essential and intrinsic incompleteness. Our refinements and sophistications of method and procedure may improve and increase the reliability of our vision, but they cannot perfect and complete it. There is an intrinsic impossibility of perfect vision of the object.

And conceive now that this vision discloses, in just this way, with all the inherent dubiety and incompleteness to which we are committed—conceive that this vision discerns the object to be a map. We are able to discover hills and mountains, distinguish names and places, follow roads and winding rivers. Through the still persisting, inevitable turbulence and impurity, the map is legible.

But the map is torn; this road leads, this river winds—somewhere. As in Gothic architecture, no matter where the eye begins it is inevitably led upwards, —so with the architecture of the map: no matter where one begins, the parts are referential chains entailing and implying each other and in each such a chain some link demands the missing part for its completion. And in its own incompleteness, the link leaves partial and imperfect the entire chain. The town entails the county, the county the state, . . . some one of these referents will be incomplete, its fulfillment in the missing part.

How then, shall the map be completed; how shall full meaning be achieved? To achieve full sense and completeness we must make the leap from the given, partial fragment to the missing and completing part beyond.

A road upon our fragment terminates abruptly at the jagged edge: a mountain range ends suddenly and

sharply at the edge; a river vanishes at the edge. What inferences may be drawn from these signs, inferences which leap into and reconstruct the missing part? What shall be our method?

If we renounce irrationalism, the history of philosophy indicates that, essentially, there exist only two available techniques. Our reconstruction will be founded on certain *a priori,* self-evident principles of reconstruction of maps or,—we shall conceive of the reconstruction as a probative, tentative hypothesis, generalizing and extrapolating from what has been discovered in the fragment which is given.

The method of the *a priori* has certain advantages. First, it possesses tremendous precision and elegance and second, relative to the initial self-evident principles, its results are necessary and certain. But despite these advantages, the method has a fatal defect. Self-evidence is an altogether ambiguous and unsatisfactory criterion. What appears compellingly self-evident to one man may be to another the patently absurd. Scarcely one of the propositions for which Descartes claimed a "more than moral certainty" has not been called in question by some subsequent thinker of at least equal stature. Euclidean geometry, for which the gigantic Kantian tradition claimed *a priori* and apodictic certainty has turned out to be only one of an infinity of possible metric geometries, each of which has its own particular "self-evident" axioms not consonant with the Euclidean axioms.

If our reconstruction then be formulated on the basis of *a priori* principles, although certain, necessary, and unique relative to such principles, it will be com-

pletely arbitrary and perhaps false relative to other similarly "self-evident" principles expressing other, perhaps contrary, insights and commitments.

Thus, if our inferential reconstruction is to be determined by some such prior principle, for example, "all maps are radially symmetrical", i.e. symmetrical about a given center,—a principle which is operative *prior* to our analysis of the given fragment,—then admittedly, our inference to the "beyond" will be certain and necessary, relative to this principle.

No such method of inferential reconstruction can carry conviction to any save those already predisposed in favor of its prior principles. To all others, such reconstruction will be altogether arbitrary and conventional.

As the method of *a priori* has certain advantages, so the method of hypothesis has certain definite limitations. Thus if we regard our inferential reconstruction as an hypothesis, it is clear that we can never completely confirm our reconstructed map, since in the nature of the case, such hypothetical reconstruction must transcend the limits of vision. The method of hypothesis cannot yield certainty.

Nevertheless the method of hypothesis is preferable to what is, at first blush, its more attractive rival. If inter-subjectivity constitutes any index to truth, it is evident that there is a greater chance to achieve truth by regarding such inferential reconstruction as hypothetical, tentative and probative and founded not upon some *ad hoc* principle but rather upon whatever vision and intelligence, operating in our given fragment, can discover. Ultimately, in such procedure, the

total architecture of the reconstruction will derive from what vision and intelligence can disclose in the given fragment.

Let us say that on the given fragment we discover that no road, save this one, terminates abruptly; no river save this one ends in a jagged line; and no mountain save this one suddenly ends.

On the method of hypothesis, it is here, in the discovered material of the given fragment, that our grounds for the inference that this road does not terminate in a torn and jagged line, that this river goes on, and that this mountain cannot so end, must be; our basic, experiential grounds for concluding that the map is incomplete are precisely here; it is from this experiential basis that we are able at all to recognize the map as torn, dubious and incomplete, as are all our discoveries in the fragment. For the processes of generalization and extrapolation are risky, and even a well grounded hypothesis lives a provisional existence threatened always by the ever-present possibility of the disclosure of new facts about our given fragment, any one of which may force a radical change or even complete rejection of any particular, hypothetical inferential reconstruction.

And further, the specific extension of this road, this mountain and this river will also be grounded upon what we can discover within the given fragment. If, for example, we were to discover that, on our given fragment, roads terminate in cities, rivers empty into seas, and mountains slope gradually into foothills, these discoveries would generate principles for the architecture of the completion of the map. And so, in our reconstruction, the completed road will go into an urban

terminus; the completed river will empty into a postulated sea, and the completed mountain range will slope into hypothesized foothills.

In general, then, our reconstruction will be regulated by those principles generalized from and out of those discoveries which vision and abstractive thought have made within the given material of the fragment itself.

But even now, before we have yet made a specific reconstruction, a gigantic difficulty is already evident within the context of this problem and procedure. For what of the terminus, the foot-hills and the sea, where do they go, what surrounds the city, what shores touch upon the sea, what plains and valleys merge into the foothills? Does not each part and the whole of our reconstruction itself refer to further parts, to wider, more inclusive contexts?

Suppose our given fragment to have been a part of New York State. Would not our reconstructed New York demand a further, wider reconstruction which would set it in the context of the United States, and this again in North America, and the Western Hemisphere, the Earth, the Solar System, and so on infinitely? For every such inferential reconstruction will itself be a map and every such map is in this sense incomplete and referential, itself but a link in a vast and infinite chain of reference to wider and more inclusive settings. Every such map ends in torn and jagged edges, every such map demands a further inferential completion.

And yet, if every reconstruction remains a fragment, partial and incomplete, is not finite intelligence, finite mind, foredoomed to incompletion, to partial understanding in such an enterprise? Only as long as

the principles of reconstruction discovered within the given fragment are such as to make the completion yet again a map, constructed in terms of the partial and incomplete elements of the given fragments, and itself again partial and incomplete.

But are there any other principles of completion discoverable?

Here in miniature analogy, is the setting and central issue of our Absolute-Relative Theory: the map is our given, "relative" world of sense and experience. And we, the inquiring intelligence are as a speck upon that map.

And it is this kind of inquiring intelligence, which discerns the world to be fragmentary, partial and incomplete; discovers that the parts are as a chain of things and relations entailing and implying each other, each chain partial and incomplete, parts and whole seeking fulfillment and completion.

The growth of a single blade of grass in my garden is determined in an essential and intrinsic way by the sun, the star Sirius, by every particle of the universe; the infinitesimal perturbations of the moon, the sun, the solar system, and ultimately the entire totality of galaxies of the universe are, in part, determined by the minute accelarations of the tiny mass that constitutes this pen with which I write.

And reciprocally, the blade of grass has its inevitable effect upon the energies of all the parts of the universe; the universe, in all its parts acts upon the accelaration of my pen.

Everything that exists possesses physical relations from which no particle, no smallest segment of the universe, nor even the totality of the universe itself is free.

And this kind of inquiring intelligence discovers itself as part of the map, part of the relative world, and sharing its imperfection, incompleteness and uncertainty. Yet even in its imperfection and incompleteness it is able to generalize its discoveries within this fragmentary relative world into principles in accordance with which inferences from the vast mélange of signs and pointers of this relative world to its completion and fulfillment beyond can be made.

But will not this "completion", like the reconstructed map itself, remain fragmentary and partial—will not such "completion" itself again be unfulfilled and incomplete, pointing yet again to wider, more inclusive contexts and leaving forever partial and incomplete the architecture of the universe?

As long as the principles of "completion" which are discovered within this relative world make the "completion" again a creation of relative worlds; as long as the "completion" is constructed in terms of the relative, the partial and the incomplete, so, just as each reconstructed and "completed" map was itself incomplete and further referential, will the "completion" of this given fragmentary relative world be always incomplete and unfulfilled.

Only on the basis of new principles discovered within the given material of this world which enables us to effect a completion of the fragment which is "Absolute", self-sustained, complete and perfect in itself can the dilemma be resolved, and the vast chain of reference and entailment be ended and completed.

Such principles Absolute-Relative Theory claims to have discovered: basic and foundational principles which, as we shall see, make possible the inferential leap

from the given, incomplete, fragmentary, relative world to the domain of the Absolute.

* * *

Perhaps the earliest and most persistent philosophic truth to which the inquiring mind is led is that that which has no opposite is meaningless. What makes the term 'black' significant is that it distinguishes one kind of entity from among others,—white, stars, and so on. The collection of words, "Made the of is cheese moon" is meaningless precisely because it fails to distinguish a particular state of affairs from among all possible states of affairs. (The fact that another arrangement of the same words yields a "false" but meaningful statement, is another concern.)

Similarly, for terms and categories; if materiality were an empty category of the realms of experience, spirituality would be meaningless and, in fact, impossible. Everything which can be said to be, must have an opposite against which it can be paired, or as we shall say, with which it is "dual".

It is this affirmation (that there is nothing without its opposite) which constitutes the heart of the Principle of Duality; and simple and almost self-evident as the principle appears to be, it possesses tremendous richness in implication.

Experience discloses that this world is everywhere and in all its aspects characterized by duality. Heat and cold, attraction and repulsion, virtue and vice, whatever exists is in a relation of antithesis and opposition to another existent. These oppositions and antitheses which induce partition upon partition of the universe are the discovered manifestations and behaviors of the world. The totality of things in all its

aspects, divides into pairs of opposites. Every natural classification is part of a dichotomy.

That everything in the relative world possesses an opposite, relative to itself, i.e., a relative opposite, is clear, no less on rational than on empirical grounds. For a world consisting of a multiplicity of distinct entities, if it is not to be an altogether uniform and characterless multiplicity of merely numerically diverse things, must be characterized by duality. Entities possess distinctive characters solely in virtue of their differences from each other, i.e., by reason of each one's being in some respect or respects what the others are not. Variety is dependent on contrast, and contrast is a relation between opposites. Hence, in a world in which there were no opposites, there could be no variety.

In one immediate sense, there is a gigantic consequence of these considerations of Duality. For clearly the world of immediate experience, the physical, material universe of alteration and decay, of becoming and change, the world of births and deaths, of stars, of galaxies, of men and civilizations—this world must also be a term in a duality, one of a pair of opposites. The totality which this duality comprises—the totality of the universe and its dual—we shall call the Cosmos; its two elements, the Major Dyad, the relation between these elements, we shall call the Major Duality, or Dualism.

As we call the one term of the Major Dyad, the Universe, so shall we, for reasons which will appear shortly, call the other term, the Absolute.

The existence of this Major Dualism implies a status for all elements of the relative world which needs to be made explicit.

As we have said, every relative entity possesses its specific relative opposite, its relative dual, but the existence of the Major Dyad implies also that not only is every relative entity dual with some other relative entity, but it is also dual with the Absolute. Or, to put it differently, the absolute opposite of the relative world is identical with the opposite of the relative world as a whole, the Absolute itself.

That this is so is evident from the fact that what is absolutely opposite to the universe as a whole must clearly be absolutely opposite to anything which in any measure participates in the nature of the universe as a whole, and every finite thing does so share in the nature of the universe.

Thus the principle of Duality is, in effect, a principle of *Double Duality*. Not only is every entity and aspect of the Relative World dual with some other relative, but also with the Absolute.

There is a possible confusion which we may well eliminate at this point before proceeding.

It may be argued that since the principle of Duality obtains, must there then not also be a dual to the Cosmos? To this difficulty, we answer that the problem is entirely verbal and for the following reasons. From one point of view, the Cosmos does have an opposite, and from another it does not, for since the Cosmos comprises all that can in any sense be said to be, it is plain that its only possible opposite is non-being—nothing. The opposite of the Cosmos then, is precisely nothing. But since nothing *is* nothing, there is an equally good sense in which the Cosmos has no opposite.

As we have said, duality, oppositeness, is a generic

trait of the universe—the divisions of the universe into antithetical pairs is pervasive and general.

But more significantly, each term, each element of an antithesis in the universe is itself transient. In the universe, there is nothing which is absolute. The universe in all its parts and aspects is Relative, Temporal, Finite, Contingent, Imperfect, Partial and Fragmentary. The universe, or as we shall say the Relative World, is precisely a world of relativity, a world in which constancy is relative, in which fixity is relative, in which permanence is relative.

Just as the map, immersed in water, is constantly dissolving, its multitude of marks and lines fading and becoming indistinct, so the Relative World (hence its name) is constantly changing—constantly in flux—constantly altering its characteristics.

In the material, physical sense, these are almost platitudes. The physical sciences are a vast compilation of evidence and warrant for this.

Explanation in the physical sciences is a functional relation. Suppose it to be asked, what is iron? In the physical sense, the only answer that can be given is in terms of operational patterns *among* entities. A thing is iron if and only if it oxidizes at a specific rate; or a thing is iron if and only if it has a tensile strength of so much and so much, and so on. These are all answers in terms of how the specified thing interacts with other things; in the first case, oxygen, in the second with forces of an external character. Nor is this only characteristic of "explanation" in the sciences. The very existence of any element of the universe cannot be independent of the existence of other elements of the universe. The physical universe, the Relative World, is a gigantic matrix of

interaction. Independence of parts of the world from other parts can be insisted upon only macroscopically, for only in the microscopic sense does the growth of this single blade of grass proceed independently of the fiery turbulence of the interior of the Sun or the enormous mass acceleration of Betelgeuse. Rather, in any meticulous and precise sense, these are not independent states of affairs but interacting regions and qualities of the world.

Nor is this purely material, physical. In any spiritual, psychical sense, the same interaction and interdependence holds. My thoughts, my ideas and my very 'modes of thought' and emotion are inherited. My language, my customs are all determinative of my psychical, spiritual life, my 'life of mind', so to speak. And these are the products of Christ, Buddha, Moses, Dante, Khalidasa, and Maimonides, and not only of these "great ones", but of the multitudinous "little ones" as well. The remote Chinese peasant tilling his meagre soil, fulfilling his "purposes", acting on his physical states, influences the "purposes" and the psychic states of the farmer in Kansas, and in Siberia. The goals and aims of individuals are also interactive and parts of a tremendous matrix. We see it clearly only in the "great ones" but it pervades us all, the great and the little. We see clearly how the ideas of Christ, Newton, and Marx have affected our own ideas because of the magnitude of the effects of these great ideas; but the ideas of Tom, Pierre and Hans also affect our own ideas, although the magnitude of the effect is smaller, and generally virtually indiscernible.

The category of interaction, of inter-dependence, implies discreteness, parts; implies that there are dis-

tinguishable parts, discrete entities within the relative world; that the relative world is not itself some irreducible "whole" but a composite of parts; a structure of interoperative "molecules", so to speak; a "complex" of interpenetrating and interplaying parts and influences.

Philosophical research, since David Hume, has regarded the contingency of the relative world, the universe, as a commonplace. That paper burns at this temperature and not at some other is not 'necessary'. It is possible, in the sense of non-contradictory, that its burning should take place at this, rather than at that temperature. It is *possible* that, on being released, this book should fall *up* rather than down. This condition would not involve a self-contradiction. That the world is as it is, is not necessary—it might just as readily be otherwise. Instead of Newtonian mechanics as a true description of motion, it might as logically, as "possibly", be a world in which a non-Newtonian mechanics would be true. The world does not possess a necessary structure. Necessity is not an attribute of the universe.

This sense of contingency has been expressed in another facet by Whitehead's insistence on the recognition of the possibility of the evolution of physical law. There is no reason to suppose that the world *has* always confirmed or always *will* confirm Newton's Laws of Motion or any other of the physical laws of our universe rather than their contraries.

That the universe is not "necessarily" as it is, that the relative world is "contingent" is virtually a basic, axiomatic concept in our thought.

It is this latter sense of contingency that brings to the fore still another pervasive or generic trait of the

universe, its essential transiency or temporality, that it is, throughout in flux. The dictum of Heracleitus that man does not step twice in the same river is a striking formulation of this mode of the world. Materially, the world is in constant process; bodies are evaporating constantly; their energy is in constant diminution; their physico-spatial limits are constantly changing; they are in motion and undergoing change. The category of evolution extends into even the most minute reaches of the world, in the general sense of alteration.

Perhaps nowhere has a more vivid picture of this external transiency and change of the material world been expressed than in the terse formulation of the thermodynamic law of entropy:

> ". . .That all the labor of the ages, all the devotion, all the inspiration, all the noon-day brightness of human genius, are destined to extinction in the vast death of the solar system, and that the whole temple of Man's achievement must inevitably be buried beneath the debris of a universe in ruins".[1]

It is, as Russell puts it, a universe constantly "on the way", constantly in process.

A universe, a relative world, throughout conditioned and interdependent, part on part; a universe contingent and not *necessarily* as it is; a universe in perpetual flux and change and like our map, throughout imperfect and fragmentary—this is the inevitable, inescapable structure of the universe which experience discloses.

It is, however, as Plato and Aristotle and a host of

others pointed out, not appropriate to speak of the relative world as simply a miasmic haze of indistinction. For even within the imperfect and contingent, the infinitely interrelated and interdependent setting of the universe, orders are distinguishable, regularities are to be found. To be sure these are imperfect, temporal and evanescent, yet they are there.

Science formulates laws; experience encounters uniformities. The contingency and interrelatedness is not so pervasive and intrusive that we cannot speak of anything less than everything. We can make distinctions, we can observe regularities, we can depend that our homes will persist long enough for us to return to them each day and that when we throw the switch, current will flow, the lamp will light, and so on.

But here again, our reliance is, so to speak, in the large only. For, more and more, we are being forced to abandon the barricades of strict certainties in favor of the stronger position of probabilities, and chance, as underlying these observed macroscopic regularities.

And still another thing must be noted about the universe—the relative world. *We are in it, our minds, our rationalties are part of it*—and so they too are partial, fragmentary and incomplete. It is as if our intellectual machinery and equipment were another mark upon the map we view, fragmentary and incomplete.

From such machinery, we cannot expect to see produced perfect specimens, perfect concepts but, as in any production system, the product will be generally less perfect, and never more perfect than the producing machine.

And just this imperfection, this residue of incompleteness, must we anticipate in our ideas and our con-

cepts of the Absolute as a perfect, complete and total domain. That is, we can never achieve a perfected vision of that which is itself perfect, but must stay resigned to a partial and incomplete image of that perfection, as the inevitable consequence of our own imperfection which we share with the relative world generally and with all its parts.

This duality, both major and minor, which the relative world evidences, both on experiential and rational analytic grounds, is expressive of its analogy to the fragmentary map with which we began our venture.

As we have seen, at every point within the relative world, each part is dual to other parts of the relative world, *and also* to the Absolute.

Select any part of the relative world, any aspect, element, object, etc.—it points beyond itself, as the parts of the map point to other parts on it, and to the completion beyond; so each part of the relative world points beyond itself, both *in* the relative world, and even more significantly, to the completion beyond—to the Absolute.

Everywhere, the relative universe points beyond itself. Its contingency posits a transcendent Necessity. Its finitude, imperfections, and limitations posit an Infinite, Perfect and Unlimited. The partiality and incompleteness of the relative bear witness to the Absolute, of which, in faint and fragmentary fashion, they are image and reflection.

And it is to the character of this transcendent object of reason and faith, revealed by Duality and the structure of the relative world, that we shall now turn.

CHAPTER TWO

THE ABSOLUTE

IN ITS duality, the Relative everywhere points beyond itself—to a completion and fulfillment, so to speak, in the Absolute—a domain dual with the Relative and whose existence is implied by Major Duality.

Since the Absolute and the Relative are dual domains, the nature of the Absolute can be inferred from the nature of the Relative by a process of opposition. It is in this sense that the Relative, the given fragmentary map, is the inevitable, originating subject-matter; for from what we are able to learn of the Relative are we able conceptually to "reconstruct" the Absolute, through the insight of Major Duality and the given discoverable character of the relative. Does our knowledge of the relative world, our knowledge of the fundamental insight embodied in the principle of duality, enable us to reconstruct the transcendental completion of the Absolute, the domain disclosed by the "leap beyond"?

Subject to the restrictions and limitations imposed by the relativity of our minds, we *can* effect the reconstruction, at least with sufficient completeness for the sense of the *influence* of the Absolute on the relative

and the sense of its *completion of the relative* to be evident.

There are certain salient features of these two senses in which the Absolute stands related to the relative world which may be seen at once and which, once seen, orient our thinking of these things: The Absolute as First Cause of the relative world—its originative principle; and the Absolute as Final Cause, final completion of the relative world.

Let us begin by making certain preliminary distinctions in meaning.

A Necessary Being is one whose non-existence is an impossibility, a self-contradiction: it is a being whose existence is of its very essence, its very nature. Such a being, is its own 'raison d'être', its own cause for existing. In its own intrinsic nature is to be found the causal agency which sustains its existence.

A contingent being is one which does not, in itself, cause its own existence. Its non-existence would not posit a self-contradiction and the cause for its existence must be sought in elements external to its own essential nature. A contingent being has the cause of its very existence, its determinate being, in something external to itself. A Necessary Being has the cause, the ground of its existence, essentially imbedded in itself, in its own intrinsic nature.

The existence of contingent entities is thus necessarily determined by entities external to it—other than itself.

But what of the determinants, the causes of contingent beings? Suppose we begin with a contingent, A. Its cause, B is itself either contingent or necessary. Suppose that B also is contingent, then *its* cause is

external to it, another thing, C, that is:

A ⟵ B ⟵ C ⟵ D . . . . ⟵ . . M . . . ⟵ . . . .

and let us suppose that *all* of the elements are contingent. Then for each element of the chain, there will be another as its cause, and since *each* in the series is contingent, there will clearly be an infinite number of contingent beings in the series.

Here, as on our fragmentary map there is no end, on the map, or any chain of entailment and reference but every part referred to still other parts and so on, endlessly, as long as we remained on the map, i.e. in the relative, the contingent.[2]

Clearly, if the chain of causal agencies of factors of determination contain *only* contingent beings, then we are caught in an infinite regression of agents, of causal factors. But if in a causal sequence there is no first cause, then there is no genuine cause at all but rather an infinite falling away. Every causal sequence must, therefore, end in a Necessary Being—in a Being which is itself its own causal and determining agent.

If there is a contingent, then there must be a necessary. (In a sense, this is, on a different tack, what Duality itself asserts) and there is a "necessary" posited as the first cause of every sequence of contingent beings.

Experience, in a thousand shades and hues, discloses a contingent world—the Relative Universe. Must not *this* contingency too, possess a Necessary Being as its first cause; is not this made inevitable by what we have just seen—there is a Necessary Being posited as First Cause of every series of contingent entities.

The logic is inevitable; there is no escape from the consequence. Every contingent being has its cause in

another being external to it. In a series of causes, determinants, all of which are contingent entities, there is no first cause. The series is an infinite regress and there is no genuine cause at all. The series, then, must have as its First Cause a Necessary Being.

The principle of Duality pairs the relative, contingent world of experience with its antithetic dual, the Absolute; and this very duality characterizes the Absolute as the opposite of the relative, and hence Necessary in its Being, self-causal, self-determinative; its own reason for, and determinator of its own existence.

Is the Absolute, as Necessary Being the first cause, the infinite determinant of the vast causal chain which constitutes the domain of the contingent and the relative?

Since the relative world is a contingent being, a realm of contingency, its cause must be external to itself. Since the Cosmos, the totality of all that can be said to be, is composed of the Absolute and the Relative, and nothing more, the *ONLY* being external to the Relative is precisely the Absolute.

It follows, therefore, that since the Absolute is the only entity external to the Relative, and since the cause of the contingent and relative *must* be external to that relative; the Absolute *is* the cause of the relative and since the Absolute is Necessary Being, it is also the First Cause of the Relative World; it is *the* cause, and *such* a cause that it is a first cause.

This point is so important and so central to our theory that we must stress it, and make it as clear as possible.

The meaning is really this:

1. Experience leads us to the Principle of Duality.

2. Experience discloses the Relative World to be a contingent being; (or a sequence of contingent beings).
3. Therefore the Relative has a dual — the Absolute, which is a Necessary Being.
4. Every contingent being has its causal agent external to itself, (and it must have a causal agent.)
5. The Cosmos, (the totality of what can be said to be), consists of the Relative and the Absolute, *and no more.*
6. Therefore the Causal agent, the determinant of the relative world is precisely the Absolute.
7. Since the Absolute is a Necessary Being, it is the First Cause of the Relative World.

The significance of such a First Cause, a Necessary Being, the Absolute, for the relative world is enormous.

It is, as a consequence of its own internally necessary existence, an Eternal Being. Possessing itself its own grounds of existence, it is uncreated and indestructible—it is an entity transcending the limits and categories of time itself and, as we shall see, space as well.

That entity,". . .like God's own head. . .", which is eternal and internally determined can suffer neither alteration nor decay; it is forever Being and totally without Becoming. In it there is no coming to be nor passing away, it is necessary, and thus cannot be other than it is, and cannot change. It is eternal, necessary, immutable Being.

In the sense in which such a Being is First Cause of the relative, it is creative and originative of that domain of contingency. As the relative world exists as

Becoming, so its owes that very existence to the domain of Being, the Absolute, since this is its First Cause.

But the mode of existence of the Absolute is eternal, and since creation cannot, by its very nature, be eternal, the causative influence of the Absolute, as First Cause, must be perpetuated throughout the existence of the relative. The Absolute does not create and then abandon; it is creator *and* persistent causative preserver or orderer of the relative. The order of nature, of the relative world, imperfect as it is—partial and incomplete[3]—is the expression and objectification of the immanence of the Absolute in the relative universe.

In these general terms, then, (and at this point they must remain general), we see the overall character of the influence of the Absolute upon the relative:

The Absolute stands to the relative as First Cause; as Necessary Being, creative and originative of the existence of that relative; and as immanent in the patterns and structures of the relative world's operations.

This, in general terms, which subsequent sections will make more detailed and specific, evidences clearly that the Absolute is a primal and governing influence upon the modes of existence of the relative world. *How* this is so, is, in a sense, the task of the rest of this book and will take us into the principle of Polarity, the second basic insight of the Absolute-Relative Theory. Still, in this general and overall sense, can we not indicate that sense in which the Absolute evidences itself as the 'completion of the relative'?

We shall see that just as, in general terms, we have seen the Absolute as First Cause, as the originative and ordering principle of the modes of existence of the

relative, so shall we see it also as Final Cause, as the teleological principle of the relative and in that sense, completing and fulfilling the relative domain—the completing and fulfilling of the "beyond" of our fragmentary, "map-like" world. And here too, our discussion must remain provisionally general, awaiting further development for detail and specificity.

The relative world is a world through and through processional; it is a world of becomings, of comings into being, of impermanences, and of constant flux and alteration.

But processionality implies ends; 'goals' or termini for these processes. In the relative world, these ends are themselves relative entities or states; and, therefore, themselves in flux and themselves processional—themselves processes.

To seek ends for processes *in* the relative is to embark again on an infinite regress

$$A \rightarrow B \rightarrow C \rightarrow D \ldots \rightarrow M \rightarrow \ldots$$

in the inverse direction to that which we have already encountered in the causal chain. And here, as in that case, since each relative end is itself a process—is itself "end-assuming"—itself entails ends, there can be no genuine ends at all *IN* the relative world since this involves an infinite regress and the restriction to the relative world yields an impossibility; for process there is; (this is experiential). There must, therefore, be an end which is final, which does not itself assume further ends in an infinite regression.

And since, therefore, the end cannot be a relative entity, or state, it must be external to the relative—non-relative.

Here, again, as in the causal case, this leaves only

one Being as End—the Necessary Being which is the Absolute.

This, too, is sufficiently important to stress and summarize:

(1) The relative world is processional throughout; this experience discloses.
(2) Processes imply ends.
(3) If the end is itself relative, then it too is processional and has an end; and so on, in an infinite regress if we restrict ourselves to ends which are relative; and there would thus be no genuine end at all.
(4) There must, therefore, be an end which is NOT in process in order that the experientially evidenced processionality of the relative world exist.
(5) Such an end cannot be *in* the relative and since the totality of all that can be said to be is exhausted by the relative and the Absolute, that End must *be* the Absolute;[4] and for the additional reason that the Absolute is that *Necessary Being* which is in no sense process, or Becoming.

We have thus initiated our discussion in terms of two generalized truths concerning the relation of the Absolute to the relative.

We have seen the Absolute as *First Cause* of the relative, as Necessary Being, originative of and immanent in, the modes of existence of the relative world.

And we have seen the Absolute as *Final Cause* of the relative; as Necessary Being which is the teleological principle of the modes of existence of the relative

world. In this sense the Absolute, as ultimate and necessary end of the Relative world is the fulfillment and completion of the fragmentary world. The Absolute is, so to speak, the "Ideal" of the universe, the relative world; that which in all its becoming and processionality it is ever striving toward; the ultimate focus and "point of convergence" of universal process.

Herein lies the vastly significant difference between the domain dual to the relative, in our sense of the relationship, and traditional philosophic views of 'duality'. For on these latter views, the domain, dual to the relative, the Absolute, is forever separated from the relative. There are literally two separate domains differing from each other *in toto genere*. No influence can extend from one to the other. The Cosmos on such a view suffers a genuine and traumatic bifurcation into disparate realms.

In our view, we have seen the domain dual to the relative, the Absolute, as wielding an enormous influence over the relative realm; as First and Final Cause, as originator of and immanent in the relative, as orderer of the most varied and inclusive Modes of existence and behavior of the relative, and as the ultimate end of the vast procession of activity which is the relative.

Before we turn to a fuller and more detailed consideration of the *"how"* of the relation of the Absolute to the relative, both as First and Final Cause, there is much more that we can learn of the nature of the Absolute through the application of the Dual relation of the Absolute to the Relative, and to our experientially given relative.

The world of experience, the relative world, is manifoldly attested to as imperfect, limited, finite, contin-

gent, fragmentary, conditioned, partial, incomplete, and so on. In general terms the relative world is a vast matrix of interacting interdependent parts; impermanent and transient in all its members and its relationships; a realm of inconstancy and evanescence; quite the analogue of our immersed and slowly dissolving fragmentary map.

As on the map, lines are fading and dissolving, relationships altering from the shrinkage and distortion of the paper; so in the relative world, man truly does not step twice in the same river, but is constantly encountering altered events, altered persons—he lives forever in a world always en route, on the way, forever, as Dante says: "in the middle of the journey".

Yet even in this writhing, evanescent matrix of interactions and interrelations, there are as we have said, *certain* discernible regularities and uniformities, albeit these *too* are imperfect and transient, themselves "in the middle of the journey". The planets describe *almost* unperturbed orbits, but not quite; crystalline structures are *almost* regular but not quite; my home remains *almost* constant during my day's absence, but not quite, it has imperceptibly shifted, imperceptibly evaporated, imperceptibly radiated; just as the crystal has been imperceptibly stressed in its growth; and just as the motions of the planets may be evidencing titanic evolutions in the tiny perturbations in their orbits.

It is to such a world, such a relative entity, that the Absolute is paired as dual.

It is clear that all this implies determinate consequences as to the nature of the Absolute itself via the opposition inherent in the dual relationship.

At once, it is evident that the Absolute is Necessary as the relative is contingent, that the Absolute is unitary and whole as the relative is a matrix of interdependent parts; that the Absolute is infinite, unlimited, perfect, as the Relative is finite, limited and imperfect. That the Absolute is a domain of fixity and unchangeable constancy as the relative is impermanent and in enduring flux; that the Absolute is not en route, is not processional, as the relative is ever in the middle of the journey.

As the relative world is permeated by dualities within itself, so the Absolute (being unitary and whole) does not contain within itself any dualities whatever. These are truths so general and so evident that they virtually leap to the mind as 'self-evident'.

There are certain consequences, however, which although relatively clear, are of salient interest and which we must make explicit.

Thus, relative existence is inevitably temporal and spatial; relative existence *endures in place;* the arena of relative existence is space-time. That which is essentially processional, ever in process, can only be so in time. The very nature of becoming which is generic to the relative world, implies a finite duration in which such becoming can realize itself, part after part, in time. This finitude and duration is a basic trait of the relative, the realm of becoming. This is epitomized in the existence of all relative entities. A man does not, and can not exist at once; his life and existence is spread out over the ages of man, days, months and years.

At any and all points in his life, his story is not yet

told, he is forever "in the middle of the journey". To realize the totality of its being, a relative existent requires a duration.

Dually, the Absolute is, *per essentiam,* fully realized in eternity—it is simply not within the range of application of the category of time; it is timeless and eternal; not Becoming, it is beyond duration; Necessary Being is eternal and timeless.

From another tack, the relative domain is spatial throughout. It is pervasively a domain of extension, divisibility, and dually, the Absolute is non-spatial. It bears the same relationship to space that it does to time. Unitary and whole, it is not extended, not divisible; it is again simply beyond spatial categories. The spacetime reference frame within which arena the domain of relative existence moves, is non-applicable to the Absolute.

And still another facet of the Relative has particularly significant consequences as to the nature of the Absolute.

Whatever is within the domain of relative existence is either identically material, physical, or else grounded in material, physical existence. With respect to the specifically material aspects of the relative, those subject matters of the physical sciences, the materiality is self-evident.

Those elements in the relative which are not so specifically physical, the psychical, spiritual elements of love, hate, intuition, more broadly, the emotive-spiritual elements, are grounded *in* material existence, the physical relative world. It is evident that there is neither love, nor hate, nor emotive-spiritual elements without the experiencing organism, without a ground

in relative physical existence.

In duality with this, the Absolute is neither material nor grounded in material existence; the Absolute is psychical and immaterial; the Absolute is an immaterial, spiritual Being.

Note that we have thus far shown the Absolute as a necessary Being, dual and opposed to a contingent relative existence. This Necessary Being we have seen to be the First Cause of the relative world,—the creative and originative principle of the relative world, and immanent in the patterns and structures of the modes of existence of the relative. We have seen it also as Final Cause, the teleological principle of the modes of existence of the relative world, the ultimate and necessary end of the relative world, its goal and "ideal" of becoming, the "completion beyond" the relative. And finally, this Absolute, this First and Final Cause of the relative world, this Necessary Being, is a spiritual, immaterial Being.

It is clear that the Absolute is Divine, and this without impiety or impropriety. The Absolute *is* God, possessing all the attributes of Deity. It is infinite and eternal, creator and governor of the modes of existence of the relative world, identical with the supreme object of worship, faith and veneration of traditional religion.

CHAPTER THREE

THE ZERO–ATOM UNIT

OUR DISCUSSION of the Absolute has discovered that the Absolute, dual to the relative, is not a domain isolated from the relative world, but is operative upon the modes of relative existence, in the double role of First and Final Cause: as originative of and immanent in the modes of existence of the relative domain; and as the teleological principle of the relative world.

But it is not sufficient merely to show the presence and general outline of the influence of the Absolute upon the relative; we must also show the machinery of this influence, the mechanism and character of the influence of the Absolute upon the relative. The explication of this mechanism brings us to the second fundamental principle of our theory: the principle of Polarity, which as we shall see, shows the Cosmos not merely as Dual, but even more significantly, Polar.

Initially, and in general terms, the polar relationship in our view is explanatory of the interaction and the correlated modes of activity of the relative world but is not explanatory in the *quantitative* sense of physical law. Polarity does not assert any quantitative "laws of

motion". It *is* explanatory in the sense that it penetrates beneath the overt structures and behaviors which constitute the subject-matters of the quantitative physical sciences to a causal and determining structural substratum of the very subject-matter of the sciences.

Beneath the quantitatively described and measured interactions of specified regions of the relative world there is a causal and determining structure productive of that interaction and process.

The causal substratum is precisely the relationship of Polarity and the relative world is disclosed as an enormous totality of manifestations of this basic fundamental 'category'.

Our explication of the Polar relationship entails the prior development of a concept completely fundamental to our theory.

The history of Western philosophy originates in the pre-Socratic, Milesian quest for the ultimate physical substratum of the universe.

The various answers given to this profound question could provide the basis for an entire history of physical chemistry. From the "water" of Thales the founder of the Milesian school, through the "atomism" of Democritus and Leucippus, the quest for the ultimate substratum of the universe continued.

In a quite definite sense, our view is also atomistic —although our "atom", we shall see, is something quite different from the traditional philosophical, or even physical atoms.

Our theory asserts that the fundamental substance, the basic building block of the universe, that of which all else in the universe, the relative world, is comprised, is an ultimate, and primordial particle which we

name, for presently apparent reasons, the Zero-Atom Unit.

In the literal sense of the term, atom, the Zero-Atom Unit is an atom. It is ultimate and indivisible.

Why an atomistic hypothesis? Surely this is the direction of the discoveries and researches of contemporary physics. Even as early as 1873, the great Maxwell said: "Natural causes, we know, are at work which tend to modify, if they do not at length destroy, all the arrangements and dimensions of the earth and the whole solar system. But though in the course of ages catastrophies have occurred and may yet occur in the heavens—though ancient systems may be dissolved and new systems evolved out of the ruins, the molecules out of which these systems are built—the foundation stations of the material universe—remain unbroken and unworn".[5] If we replace "molecule" by "atom", the point of view is clear and contemporary.

And even more recently, the advent of nuclear, sub-atomic physical developments has made more and more cogent and physically reasonable some kind of atomic basis, although not anything like the atom and void of, say, a Lucretius. For the conjoined researches of Einstein and Planck have made an atomism inevitable. The former's reduction of "mass" to "energy"[6] and the latter's introduction of a least multiple, a "quantum" of action, is essentially equivalent to a reduction of the material universe to energetic forms constructed of integral multiples of a fundamental, indivisible, ultimate unit of mass-energy.

Thus, our insistence upon the atomistic character of the foundational unit of the material universe is

thoroughly consonant with the tenor of physical research.

Nor is it, so to speak, intrusive upon the physicist's proper domain; for our theory does not say *what* the Zero-Atom Unit is; whether it be the photon of energy or something more fundamental still which the physicist may discover, is not the issue. The assertion of the Zero-Atom Unit and its status of ultimacy amounts to a prediction, that *whatever* the physicist discovers to be the ultimate, fundamental unit of material structure, it will be atomic in our sense, and will fulfill the conditions our theory prescribes for the Zero-Atom Unit; it will be a Zero-Atom Unit and if it *is* the photon, then the photon *is* the Zero-Atom Unit.

The essential atomicity of the material, relative universe is, apart from these considerations, an internal consequence of the Duality in the Cosmos. Necessarily, then, the relative world, the material universe, is atomic, since, in virtue of the Duality of the Absolute *and* the Relative, the relative realm must be the counterpart, the opposite of the Absolute; and since the Absolute is, as we have seen, infinite and unitary, the relative must be finite and characterized by basic multiplicity; that is, atomic.

In our discussion of the Absolute, we have seen that as First Cause of the relative, it is originative and creative of the relative realm.

And at this point it is meet that we consider the status of judgments about creation, or origination of a universe.

To the extent that creation is, in at least some minimal sense, a "happening", our judgments regarding it

are "empirical" in the sense that they are presumed to be descriptive of a state of affairs which obtained at a determinate time. And yet, from the methodological standpoint, they are scarcely "empirical" in the sense that they are amenable to observational adjudication; we are in no position at present to "observe" the creative occurrence and thereby confirm our judgments about its character.

These considerations do not suffice to still man's inquiries and curiosities *about* the creative occurrence. They do, however, impose limitations as to what can be said and with what reliability.

Plato, for example, avowedly can only provide a myth, the immortal creation myth of the Timaeus in which religion, mystery and allegory are woven into a vast and misty tapestry. The Biblical version of Creation is also essentially allegorical and mythical, frankly transcending "empiristic" claims or criteria.

Thus, with these considerations in mind, our theory affirms a creative act on the part of the Absolute[7] as First Cause of the relative world; the Absolute is creative and originative of the primordial building block of the universe, the Zero-Atom Unit.

The original creation, the only genuinely creative act, is precisely the production of the ultimate 'particle', the Zero-Atom Unit. It is that created element upon whose existence the existence of the entire realm of the relative rests; in this created element is encompassed the entire story of the universe. The Zero-Atom Unit, as the primordial element of the relative realm is the 'first-born' of creation, so to speak, and arises by an originative 'act' of the Absolute by which the relative

and finite appears, in all its duality with the Absolute.

It must not, however, be assumed that this originative occurrence involves any transformation in, or modification of, the Absolute. The Absolute does not "become" the relative Zero-Atom Unit, since the Absolute is Being and can, in no sense, Become or modify itself in its eternal changelessness.

With the creation of Zero-Atom Units, relativeness and contingency come into existence; and hence all that coterminously characterizes relative existence—space, time, energy, motion, the entire vast domain of relative phenomena and appearances. Since the Zero-Atom Unit is the primordial building block, the intrinsic unit of the universe, all the manifestations of the universe are immanent in the nature of the Zero-Atom Unit.

In its duality with the Absolute, the Zero-Atom Unit can be seen as capable of possessing immanently the totality of relative manifestations. For the Absolute, necessary unchanging Being, is wholly *actual,* without growth or decay. There is no sense in which it can be said to "look forward" or "reminisce". Its reality is an eternal, timeless perfection—without goals of becoming, directions, or tendencies—it is pure Actuality; and, as an apparently trivial consequence, since it cannot *become* at all, it clearly cannot become Relative.

In duality with this is the Zero-Atom Unit. As the Absolute is Actuality, so the Zero-Atom Unit is in part Potentiality, Capacity—a complex of finite possibilities yet to be actualized. In a fundamental sense, the Zero-Atom Unit may be conceived of as a unit of capacity, or potentiality. In them[8], in potentia, inhere the totality of manifestations which comprise the relative world, the universe.

However, there is an important limitation which we must not ignore. For in its duality with the Absolute, no Zero-Atom Unit can become "Absolute", and since all that is relative consists of Zero-Atom Units, nothing relative can ever become Absolute. In precise duality with the Absolute's incapacity to become 'Relative', *the Absolute and the Relative can never either become the other in any possible permutation of possibilities.* In a sense, they are each the limits of the other; so to speak, the 'upper' and the 'lower' bounds, respectively.

Still another set of attributes of the Zero-Atom Unit is determined by its duality with the Absolute.

Thus, as the Absolute is Being, without Becoming, so, in duality, the Zero-Atom Unit possesses as primary properties[9] precisely these: Motion, Field, Electricity, Free Energy, Life, Mind, Value, and telic character which we shall consider later.

The Zero-Atom Unit is, then, *not only* capacity, *not only* potency to become the relative world, but is also possessed of certain determinate primary properties.[9]

Since they are all, at creation, units of capacity and primary property, the true elements of things are clearly all identical with each other; each idempotent with every other; *each* unit containing, within itself, the potentialities of *all* that is ever to appear as a manifestation in the physical, relative universe—life, mind, consciousness, intelligence, virtue, man, motion, energy; in fact, *all* the powers and behaviors of the world of physical, relative existence.

In some manner, these qualia, these varied manifestations which constitute the body of the relative world—these must be either actualizations of the po-

tentialities of the Zero-Atom Units evoked in some complex behavior, or primary properties of the Zero-Atom Unit, including its telic character.

The precise nature of our view of the status and functionality of the Zero-Atom Unit will perhaps be most clearly rendered in a somewhat historiographic contrast with a view to which it is significantly and enlighteningly opposed.

Prior to the advent of what one may call a 'philosophic mechanicalism', the dominant theory of change and becoming as a natural manifestation, was the ancient Peripatetic philosophy of substantial forms; slightly the worse for the wear and tear of time, interpretation and countless transliterations. In this altered form, it posited in each kind of entity, a special 'form' which constituted the essentiality of its nature. Accordingly, on this view, "...fire differs from water not only through the position of its parts but through an entity which belongs to it quite distinct from the materials. When a body changes its condition there is no change in the parts, but one form is supplanted by another".[10] When, for example, wood becomes smoke, in burning, this interpretation claimed that a new form replaced the original to constitute the new manifestation.

The difficulties which this position entailed were innumerable, incredible, and, in fact, incredibly innumerable! Thus, the view required, finally, the introduction of infinite divisions among the substantial forms and a second infinity of divisions into substantial and accidental forms; and so on. But even apart from the complexities, the view engendered positive absurdities in explanation. Thus Toletus says: "The

accidental forms have not only a repugnance but a definite repugnance, as between white and black, while between substantial forms there is a certain repugnance but it is not definite because the substantial form repels equally all things. Therefore, it follows that white, which is an accidental form, results only from white and not from black, while fire can result from all the substantial forms capable of producing it in air, in water or in any other thing".[11]

In other contexts these views led to other, although related, absurdities; that gravity is the substantial form of those things that fall, while lightness is the substantial form of those things that rise; and so on.

It was in revolt against this kind of enterprise that the 'New Physics' of Gassendi and Descartes insisted that all the phenomena of bodies are reducible to modifications of the fundamental substance of extension; form, position and motion.

From the physical point of view, the Cartesian "program" has been the one that science has followed. As far as possible, the manifestations of the physical, relative universe have been subjected to a reduction to essentially mechanistic principles, the interplay of whatever are, in the last analysis, Newtonian 'particles'; whether they be mechanical, electrodynamical, and so on, is not essential.

To this extent, and so far, our view is coincident with these essentially Cartesian elements, both positively and in their opposition to such views as those of the "substantial forms". In our view, the totality of manifestations of the universe, the relative realm, is to be seen as varying combinatorial complexes of Zero-Atom Units. In this sense, we are Cartesians, or New-

tonians if one prefers. For we too conceive of the universe as a complex of particles, our Zero-Atom Units; but from here on we differ with the Cartesians. For the Cartesians (or the Newtonians) mind, spirit, the psychical in general, is NOT reducible to extended substance, but remains dualistically (in the schismatic sense) disparate from the realm of extension; not comprehensible in terms of the interplay of particles, as this term figures in Cartesian terms.

For us, however, there is no such dualism; *all* of the manifestations of the relative realm, physical *AND* psychical *ARE* precisely reducible to the combinatorial complexes, virtually infinite in variety, of *our* particles, the Zero-Atom Units. And this is possible, on our view, precisely because the Zero-Atom Unit is not a mere particle (see Ch. III, page 38) possessing extension, but is rather the fundamental unit of the universe; potential with *all* relative occurrences, and actualizing these multitudinous capacities and potencies through the virtually infinite possible combinatorial complexes available to it and its fellow Zero-Atom Units in virtue of its telic character.[12] Thus, as we shall later see, the difference between Hydrogen and Uranium is nothing but a difference between the combinatorial complex of Zero-Atom Units of the one and a different combinatorial complex of Zero-Atom Units of the other; the difference between the organic, the animate, and the inorganic, the inanimate, will again be seen to lie in differences between varying combinatorial complexes of Zero-Atom Units.

We must note in connection with our use of the term Z.A.U. as a particle, an important consequence of Polarity for such uses.

It is important to recognize that polarity as such implies the concept of 'field'. An entity and its field are inseparable, indeed they are one and the same. Whenever we say "body", we mean "body"—and—field—inseparable—from—each—other.

Energy is as essentially a trait of the relative domain as it is not a trait of the Absolute. In its duality and divergence from the Absolute, it characterizes the gap between the two cosmic poles and is indicative, so to speak, of that dual impulse toward the final referent,—the Absolute.

As a relative dual it manifests itself both as motion and force, the latter pointing up the potential and stress set up by the divergence of relative entities from the Absolute; the former pointing up the changes of states of things from their relative aspects. Within the major duality, energy appears as activity; the minor duality demarcates it as, on the one hand, motion and, on the other, force.

In qualitative duality to the staticity of the Absolute, the ultimate "particle", the Z.A.U., is energy, or field; for these are mutually implied by each other and hence equivalent.

For this reason, we have read our view as being, in a sense, a "philosophic mechanism"; in the sense in which a mechanism insists that *all* phenomena are reducible to the interplay of 'particles', where a particle is understood as an 'extended point' or field; in that sense, we, also, espouse a 'mechanism' and insist that *all* phenomena are reducible to the interplay of 'particles', where, in our view, a 'particle' is understood to be a Zero-Atom Unit, understood as a unit of potentiality and capacity.

It would, however, be a serious error to conclude that our view of things is simply science, say the science of Newton, with an altered interpretation of the term 'particle'. On the contrary, the fact of *this* interpretation of the particle of science, the fact that we take the particle to be a Zero-Atom Unit in a dual relationship with the Absolute, is an essentially metaphysical step; and in that step, parts company with science.

For the phenomena of nature, of the relative world, will be quantitatively explained in the same way whether the ultimate constituents of the world are taken to be material particles, in the Newtonian sense, or rather foci of energy, in some Boscovitch-like interpretation, or Poltergeists. These interpretations will not alter Galileo's Law of Falling Bodies, or Coulomb's Law of Electrostatic Attraction, or Heisenberg's Principle of Indeterminacy. With respect to the quantitative explanations of the sciences, these views are, so to speak, neutral; the fact that we conceive the ultimate constituent to be a Zero-Atom Unit, as specified, does not imply that we reject or challenge, on this ground, any physical discovery, any physically demonstrated uniformity or regularity in the relative realm.

What *this* interpretation of the ultimate constituent *does* entail, is some specific explanation of *WHY* these regularities do, in fact, obtain. For the physicist and the chemist, the WHY is forever beyond his apparatus.[13] It is to this domain, out of the reach of the physical scientist, that the particular interpretation of the Zero-Atom Unit, dual with the Absolute, as the ultimate constituent of relative existence, is relevant and explanatory.

For, in the character of the Zero-Atom Unit, dual

with the Absolute, we shall discover the causal substratum for the observed regularities, uniformities and orders of the relative realm.

Let us say now what we mean and expound and explicate later. What we are looking for is an explanation of the WHY of these observed regularities in the relative realm and, in an ultimate sense, we have already provided the answer in the Absolute as First Cause.

But this is not enough; what we are more specifically seeking is the "mechanism", so to speak, the "gearing system", the "electron tube circuit" THROUGH WHICH THE CAUSATIVE ACTION OF THE ABSOLUTE PRODUCES THE OBSERVED PHYSICAL, RELATIVE ORDERINGS IN THE UNIVERSE. This is the subject matter of our present stage of inquiry.

With Leibniz, we see the causative agency, the immediate 'system' of production, as non-mechanistic. "When I seek for the ultimate reasons of mechanism and the laws of motion I am surprised to discover that they are not to be found in mathematics[14] and that we must turn to metaphysics"[15]—that is in a *metaphysical,* rather than a physical or mechanistic relation our answer will be found; in a relation between the Absolute and the Zero-Atom Unit, a relationship which we characterize by saying that the Zero-Atom Unit is not only dual to the Absolute but polar with it as well; the Zero-Atom Unit, dual *AND* polar with the Absolute—in this statement we have essentially the whole story. That is precisely the character of what we mean by Polarity—the essential metaphysical relationship between the Absolute

and the Zero-Atom Unit; and *a fortiori,* between the Absolute *and* the Relative.

Precisely this Polarity is the relation by which the various mechanistic combinatorial complexes arise and thereby actualize the multiple potencies and capacities of the primordial, foundational unit, the Zero-Atom Unit.

It is in this sense that the Zero-Atom Unit is the bridge over which the Absolute exerts its influence upon the entire relative realm. Bound forever to the Absolute in its Polar relationship, the Zero-Atom Unit, as constituent of all relative entities, is the omnipresent carrier of the influence of the Absolute through all the vastnesses of relative existence. Through it, the relative is always bound and responsive to the Absolute. In this sense is the Absolute immanent in the relative realm. The relative, in this way, is shot through and through with the influence of the Necessary Being which is First and Final Cause of the vast procession of relative existence. Through the Zero-Atom Unit as unit of Polarity, so to speak, and unit of the relative realm, the entire relative realm is bound, polarized, with the Absolute. For the Zero-Atom Unit persists as polar with the Absolute throughout its participation in the combinatorial complexes which constitute the domain of relative entities.

* * *

There are still certain points which need to be made clear with regard to the Zero-Atom Unit, before we go into the matter of this essential metaphysical relation underlying the manifestations of the relative: Polarity.

We have, thus far, spoken mainly of the Zero-Atom Unit as unit of capacity, of potentiality. This, although true, is not the entire picture; for the Zero-Atom Unit possesses certain properties, *per se,* and, so to speak, *actual* in each Zero-Atom Unit in its individuality.

Thus, the individual Zero-Atom Unit possesses as we have seen, *without further actualization,* the properties of Field, Motion, Energy and Life, Mind and Consciousness.

Generally, (a) *primary properties* are those possessed 'actually' by the Zero-Atom Unit, *per se,* in its individuality; Field, Motion, Energy and particularly, its telic character, as we shall see, and (b) *secondary properties* are those properties manifested by combinatorial complexes of Zero-Atom Units.[16]

Out of these primary properties (and the inherent potentialities of the Zero-Atom Unit), determinative of the entire arena of human experience and of all phenomena constitutive of the relative realm, the secondary properties of the relative world, emerge through the combinatorial process.[17]

Among these secondary properties, our view maintains, are *space* and *time*. The entire space-time framework, like all else in the relative domain, is a product of Zero-Atom Units, dependent upon them and relative to them. Zero-Atom Units "spin this arena, this stage out of themselves", so to speak. They do not find it ready-made for them. The Space-Time framework does *not* precede the appearance of Zero-Atom Units.

The impossibility of picturing this state of affairs is no real objection to the validity of such a doctrine. Space and time, in themselves, are not as simple and

understandable as we rather naively tend to think. It is true that our minds cannot picture either the Absolute's utter transcendence of space and time, or, in respect to the Relative World, a nothingness in which not only our familiar environment, but space and time also, are absent. That is, our mind apparently can picture things *ONLY* in terms of the space-time framework; all our thinking presupposes space and time and takes place within space and time. Yet, it is as difficult to picture space and time as wholes as to picture non-space or non-time. For instance, we cannot picture to ourselves a space that extends so far and no farther, for the question immediately arises, what is beyond the end of space? And the mind replies, more space! In the same way, we find it impossible to picture a beginning or an end of time, because at once we imagine a "time" before and after that time. All this is mentioned merely to indicate that the assumption of space and time as a locus or arena present before the beginning of things and independent of them, is just as difficult to conceive as is any other hypothesis about the nature of space and time. Consequently, the human inability to picture space and time as secondary to the ultimate indivisible units of the universe, is no argument against regarding them as secondary.

Our view regards the space-time framework of the relative world as a secondary property of the Zero-Atom Unit. With their coming-into-being, the primary properties of Field and Motion, etc., give rise to the space-time arena within which all the phenomena of the relative occur.

Not only the space-time framework, but the exist-

ence of mass-bodies, their inherently associated energies, internal electro-dynamical and motional, and all of the "properties", the paraphernalia of the physical sciences, all of these, on our view are secondary properties associated with complexes of Zero-Atom Units.

Thus, the properties of physical, chemical and electrical phenomena are "secondaries" of the Zero-Atom Units—derivatives of the primary properties of the Zero-Atom Unit.

Nor is there any essential difference in our view of the secondary psychical properties; these too are the actualizations of the potentialities inherent in the Zero-Atom Unit, in its primary properties and in its Polarity with the Absolute.

In general then, the totality of *secondary properties are the manifestations of the relative world which appear in the combinatorial complexes of the Zero-Atom Unit.* These are evoked, so to speak, through the causative action of Polarity, the metaphysical relation between the Zero-Atom Unit and the Absolute which brings these combinatorial complexes into being and which, in turn, actualizes the potentialities inherent in the Zero-Atom Unit.

To put it differently, secondary properties are those which are manifested by complexes of Zero-Atom Units *AND* it is only through such combinatorial process that the inherent potentialities of the Zero-Atom Unit are actualized. (See Ch. IV, p. 59 et seq.)

And it is to an examination of the relationship of Polarity and the processes of combination that we shall now turn.

It is quite to the point here to mention a consequence of our theory which is of considerable import-

ance. Since the Zero-Atom Unit is the foundational unit of the relative—the ultimate constituent or component of all that is relative, its primary properties must be universally distributed throughout the relative, so to speak.

What is being asserted here amounts to this: the primary properties of the Zero-Atom Unit, those manifest in the actual Zero-Atom Unit *per se,* persist throughout all combinatorial activities of the Zero-Atom Unit.

Thus in a combinatorial complex of Zero-Atom Units, there will appear:

1. *Secondary Properties*: Those properties pertaining ONLY to the combinatorial complexes of Zero-Atom Units; actualizations of the potentialities *IN* the Zero-Atom Unit.
2. *Primary Prop*erties: Those properties manifest in the individual Zero-Atom Unit, and persisting through all combinatorial activity.

All relative bodies or entities are organizations, combinatorial complexes of Zero-Atom Units; this is true whether the entity is stone, plant, or man. Our theory sees the entire relative universe as a construct of one, and only one, kind of primordial building block and rejects any analysis in terms of sporadic intrusions of extraneous, "novel" factors into the construction of the universe. Clearly then on our view, not only is, let us say, mass and kinetic energy potential in the Zero-Atomic Unit, but also such "secondary" properties as Life, Mind, Value, Consciousness and so on must be immanent in the Zero-Atom Unit. The Zero-Atom Unit contains within itself, germinally, every-

thing that the relative realm comprises. The Zero-Atom Unit is the basic unit of every manifested property—of any property which could be manifested in the experiential relative world.

On this view, we predicted long ago that no break or sharp transition, which would correspond to the division between 'life' and 'non-life' existed; but that, in a sense, panpsychism is more appropriately a true description. That is, that *life,* as immanent in each Zero-Atom Unit, is an immanence in *each* relative entity, since any such latter, stone, plant, or man is a composite of Zero-Atom Units, or as we say, a panpsychism.

What is of particular interest in this connection is the subsequent confirmation of this 'prediction' by the work of Dr. W. M. Stanley of the Rockefeller Institute, who recently reported a set of experimental findings, most definitely confirmatory of our point. The essential point of Dr. Stanley's report is this: The division between 'animate' and 'inanimate' matter is merely apparent. Men have long conjectured on the origins and structures of life and many have regarded the appearance of life as an intrusion, at some moment of past time, of a wholly new and extraneous factor into a universe previously made up only of inanimate matter. Such a view entails the questions: when and whence came 'Life' into this realm of non-living matter? Or, what combination of non-living foundation-units can possibly have given rise to life?

To answer by contending that matter is *not inanimate* in this sense, that is, by stating that life is a property immanent in the building blocks of the universe, of all matter, is precisely the solution and claim of

our view. Dr. Stanley's work on viruses has furnished a contributory verification of this view.

As Dr. C. B. Davenport said in the course of a discussion: "The researches of Stanley are of peculiar interest to those biologists who have a more or less speculative trend. They suggest that we must about-face in looking at the problem of evolution. Hitherto we have sought to go downward in the series to find the simplest organism which might represent, perhaps, the beginning of the organic series. Now, I think we begin our conception of evolution with a consideration of the increase in molecular complexity and degree of organization of molecules. It is generally believed that the earth was freed from the sun as a ball of fire with a temperature probably higher than that of the sun today. At that time all the elements were uncombined, as in the sun today. As the earth cooled, simple chemical compounds began to form. . . These eventually united to form the simple carbohydrates." After tracing the evolution from simple carbohydrates to simple organic molecules, Dr. Davenport concluded: "Thus there have evolved, in the course of hundreds of millions of years, organic molecules of ever increasing complexity and more perfect organization. . . These latter molecules apparently acquired the power of multiplication and mutation, and these processes are recognized today as outstanding processes in the very lowest of cellular organisms, like the micrococci".

In our view, this is what is to be expected in terms of fundamental building blocks, which are themselves immanent with Life,—the Zero-Atom Units.

CHAPTER FOUR

POLARITY, THE ZERO–ATOM UNIT AND THE ORDERS OF RELATIVE EXISTENCE

THE ENORMOUS variation of the relative world is a manifestation of the potentialities inherent in the Zero-Atom Unit, dual and polar with the Absolute—actualizations *made* manifest through diverse combinations of Zero-Atom Units. This is essentially what our discussion has brought out, so far.

In Polarity we find the causative tension which produces these multitudinous combinatorial complexes which actualize the immanent traits of the Zero-Atom Unit.

What is Polarity? What is the nature of this relationship between the primordial Zero-Atom and its majestic dual, the Absolute, that it can produce the vast reaches of space and time, the gigantic mass of the relative, physical universe, and the conscience of man from these fundamental units of capacity, the Zero-Atom Unit? It is to the task of explication of this that we now turn.

The physical sciences, and common sense experience, have, in a restricted sense, admirably fulfilled the philosophic dictum of Leibniz; that in relative exist-

ence, passivity means non-existence. A relative entity, purely passive, cannot be. Activity (or if one likes, inter-activity) and existence are inseparable. To be and to act are equivalent. Relative existence essentially involves activity: *QUID NON AGIT NON EXISTIT;* that which does not act does not exist.

It is precisely in this connection that our mechanist view parts company with, say, a materialistic mechanism. The essence of relative material existence is not, as the Cartesians maintained, mere inert extension, it is action—the fundamental category of activity.

Passivity, inactivity, can only be insisted upon in the large, so to speak. Only grossly is the river on our fragmentary map, still,—only in the large are the vast interstellar forces 'in equilibrium' only as an ideal limit is there an 'Absolute Zero' at which molecular activity ceases.

But this apparent stillness is only in the large. Minute examination discloses an infinitely closely woven matrix of activities from which no regions of the relative world are free. The motionless majesty of this gigantic oak is, in the microscopic, a maze of swirling nebulosity of atomic and electronic activities. The steadfast brilliance of the star Sirius is the surface of gigantic and violent motions.

Aiken, in one of his short and insightful poems, has caught the sense of this in exquisite terms:

Watch long enough and you will see the leaf
  Fall from the bough. Without a sound it falls:
And soundless meets the grass . . . And so you have
  A bare bough, and a dead leaf in dead grass.
Something has come and gone. And that is all.

But what were all the tumults in this action?
What wars of atoms in the twig, what ruins
Fiery and disastrous in the leaf?
Timeless the tumult was, but gave no sign.
Only the leaf fell, and the bough is bare.

This is the world; there is no more than this.
The unseen and disastrous prelude, shaking
The trivial act from the terrific action.
Speak: and the ghosts of change, past and to come
Throng the brief word. The maelstrom has us all.

In the greatest apparent stillness and quietude: "what wars of atoms . . . what ruins, fiery and disastrous. . .", activity *is* existence—*QUID NON AGIT NON EXISTIT.*

Whatever acts, acts under the impression of force, influence, tension, stress, or whatever word be chosen. The relative world in its active quiddity entails force, stress or tension. *This* is preconceived in the pervasive trait of activity. As universally pervasive as is activity, so pervasive is the entailed force or stress.

The essence of the relative realm, its activity, entails a universal substratum of causative forces.

Let us consider now the primary properties; those 'attributes', so to speak, actual in the Zero-Atom Unit *per se*. We have seen these to comprise Life, Motion, all categories of activity, telic character, etc. of behaving—and, therefore, all entailing causative forces.

Since these attributes are "full-grown" in the Zero-Atom Unit at creation, (else the Zero-Atom Unit would 'become' what it is, rather than be created what is is), they are instantaneous with creation, under the operation of force causative of these attributes.

Could such a force be physical? Clearly not; physical forces are temporal—and at the creation, time and space *are not,* since they are secondary properties.

The force under which these attributes appear then must be *meta*-physical, and not physical—since, as we have seen, the physical force would be an impossibility.

To put it somewhat differently, the physical, relative, contingent, is always temporal. Physical forces are temporal relations among physical entities—relative entities.

For one Zero-Atom Unit then, no such relation could obtain—yet force of SOME KIND there must be, since the primary properties of the Zero-Atom Unit are *active.*

Ergo, the force entailed must be *meta*physical,—between Zero-Atom Unit and Absolute, since, at this stage, there are no other 'terms' available, so to speak.

It is this that our view means by Major Polarity—the force relation, the impulsive operation upon the Zero-Atom Unit *by* the Absolute and it is in this sense that our view is not merely a mechanism but entails the presence of metaphysical forces which make of the relative realm a vast 'dynamism'—an infinitely "sagacious" system of forces orderly and harmoniously fused under the synoptic direction of the Absolute; not a materialistic mechanism, but a fundamentally dynamic view of the world. "The variegated shadings of the material world have therefore ever been looked upon by gifted men as recording the self-realizing thoughts of an all-powerful Intelligence; in the features of the universe the thoughtful observer has ever recognized the lineaments of God's countenance smiling upon man".[18] There is a poetic, and even somewhat more

exact analogy between the above concept of the unrolling of the universe as a process of self-realization of an absolute, infinite Intelligence, and our own concept of Polarity as the meta-physical force which draws the universe of relative existence in procession toward the Absolute. For this too is, in a sense, a self-realization of the Absolute: Polarity is the constant *Principium* in terms of which the variations and motions of things are comprehensible, and in which they are grounded.

Fundamentally, the concept of Polarity marks the view that nature is an internal unity—a unity which reveals itself necessarily under the final form of multiplicity. It is Polarity which expresses the immanence of the Absolute in the world. As Goethe put it, "what were a God who only impinged externally, and turned the All in a circle on his finger? It becomes Him to move the world in its interior, to cherish nature in Himself, and Himself in nature, so that whatever lives and moves and is in Him nevermore lacks His power and His spirit". This is a clear statement of our own view—replace the God of Goethe by the Absolute, and this states a close parallel to our own view.

As we have already noted, the essence of our disagreement with materialistic mechanism lies in the latter's staticity; in that it offers no "dynamic' of the universe, and that it makes anomalous any teleological structure in existence, a structure guaranteed by the role of Final Cause which we have seen the Absolute to play. For to the extent that the Absolute stands as Final Cause to the Relative World, and this we have seen in our discussion of Duality, to that extent must the relative world be teleological in structure—processional, so to speak. And this processional quality is pre-

cisely what is made impossible in terms of materialist mechanism; and is why our view posts a dynamic and processional relative world.

Relative existence is born with the creation of the Zero-Atom Unit; with this creation there comes into being all that characterizes relative existence. Space, time, motion, field; all of the vast concourse of phenomena and the laws and regularities which they fulfill are simultaneously born, for, they are all inherent in the Zero-Atom Unit, polarized with the Absolute.

All that is (or ever can be) is in (or inherent in) the Zero-Atom Unit. It is in precisely this sense that the unit is the primordial building block of the world.

Thus, as we have already seen, space arises coterminously with the Zero-Atom Unit—for space is nothing but the possibility of the coexistence of a multiplicity of deviate things; time arises coterminously with the Zero-Atom Unit—for time is nothing more than the possibility of change and alteration. Motion, and with it energy, of which motion is the essential ingredient are also coterminous with the Zero-Atom Unit.

Out of this entire alembic of Absolute-Z.A.U. metaphysical relationship the essential dynamicity of the Zero-Atom Unit emerges as the essential characteristic of the relative—for the foundational dynamicity of the Zero-Atom Unit follows at once from its character as the original divergent[19] from the Absolute, since as primary divergent, it must be dual to the Absolute. These two must, therefore, comprise the original and basic dyad of relative existence. Thus the Zero-Atom Unit, must be diametrically opposite in its nature to the Absolute[20]; must possess the intrinsic differentiatedness of all dyads, and in particular, the Major Dyad.

We have already seen that the Absolute is characterized by staticity in the greatest possible extent—and this implies the point of relative dynamicity. For the Absolute is NOT processional, the Absolute is NOT on the way, the absolute has *no* ends, and is utterly devoid of any teleological structure.

And in precise duality with this we shall expect the Zero-Atom Unit to be characterized by motion and energy, to be perpetually on the way, to be intrinsically teleological in structure, to be characterized by the fact that it does possess a τελοσ, an end, a goal. This is the crux of the characterization of the Zero-Atom Unit, for in this trait is to be seen the dynamicity of the Relative world, and its processional character—for all else in the universe consists simply of combinatorial complexes of Zero-Atom Units; and these fundamental traits or properties of the Zero-Atom Unit (which it possesses, not in potentia, but actually) are transmitted into the Relative World in all its aspects.

What is this dynamicity? This can only be given in terms of the telic character which characterizes the Zero-Atom Unit. In duality with the "non-telic" Absolute, the Zero-Atom Unit *is* "telic".—What is its telic character?

Consider the Zero-Atom Unit at creation—what *CAN* its end, goal be? There is but one possibility—the Absolute, *since this latter is the only other existent within the cosmos.* This point is so central, and so fundamental to our entire theory that we shall formalize it for purposes of clarity and fixation.

1. The Absolute is "non-telic" in character. This follows from the very definition of the Absolute.

2. The Zero-Atom Unit is the Polar dyad of the Absolute.
3. Therefore the Zero-Atom Unit *is* "telic" in character. This follows from the concept of duality, and the defined character of the Absolute.
4. Consider the first Zero-Atom Unit; this can only have one other existent as its end—the Absolute.
5. Therefore the goal of the Zero-Atom Unit is the Absolute.

Here precisely is the key to the dynamic structure of the relative world—*the basic, all-pervading, primitive unit; the primordial building-block, of which all else is only a combinatorial complex; this basic unit is itself, intrinsically and inherently telic; its Absolute goal is an essential part of its nature and being.*[22]

Our theory asserts, then, that the fundamental substance, the basic building block of the universe, that of which all else in the Relative universe is composed, is not simply an "atom" in the traditional sense of a Leucippus, but closer in sense to the "Monad" of Leibniz, in that it is a particle essentially telic in character. In this, our view is both "atomistic" and "non-mechanistic"; we are also Cartesians and Newtonians[23] in the limited sense that we too conceive of the universe as a complex of particles, our Zero-Atom Units. From here on we differ with Cartesianism or Newtonianism, not only in our rejection of the dualism inherent in the latter analysis, but also in our view of the nature of the Zero-Atom Unit as telic. In the sense in which a mechanism insists that *all* phenomena are reducible to the interplay of "particles", we too are mechanistic, but only in this sense—for the crucial dif-

ferentiation lies precisely in the telic nature of our "particle", the Zero-Atom Unit, as opposed to the Newtonian or Cartesian "particle".

In this teleological structure of the Zero-Atom Unit we have the "gearing system", the "electron tube circuit"[24] through which the causative action of the Absolute produces the observed physical, relative orderings in the universe; here is the essence of Major Polarity—the striving—essentially imbedded in the telic character of the Zero-Atom Unit—for the Absolute, its intrinsic goal; through this striving the various combinatorial complexes arise and thereby actualize the multiple potencies and capacities of the primordial, foundational unit, the Zero-Atom Unit.

Precisely in this sense do we speak of the Zero-Atom Unit as the bridge over which the Absolute exerts its influence upon the entire relative realm. Through the essential striving of the Zero-Atom Unit toward the Absolute, does the Absolute "act" upon relative existence. Through it, in its striving toward the Absolute, the relative is always bound and responsive to the Absolute. In this sense is the Absolute immanent in the relative realm. In this way, the relative is shot through and through with the influence of the Necessary Being which is First and Final Cause of the vast procession of relative existence. For the Zero-Atom Unit, essentially telic in character, and through its essentially teleological structure, bound to the Absolute, persists in its striving toward the Absolute throughout its participation in the combinatorial complexes which constitute the domain of relative existents.

It is this tension, this urge toward the Absolute, this meta-physical, teleological urge which we call *Major*

Polarity; the metaphysical urging toward the Absolute inherent in each Zero-Atom Unit. Out of this striving comes the entire multitude of relative existence; as a consequence of this striving, the combinatorial complexes of Zero-Atom Units come to be. These make the relative world in which the secondary properties of the Zero-Atom Unit are evoked. How this comes about we shall now consider.

In order to do this, we must introduce and explain a derivative notion: *divergence,* by which we mean:

> *the fundamental difference between that which is partial, limited, contingent, transient, and that which is complete, unlimited, necessary, changeless—that is, between any relative entity and the Absolute.*

Thus, the fundamental striving of the Zero-Atom Unit, and *a fortiori,* all relative existence composed of Zero-Atom Units in combination, is toward the reduction in divergence; the approach to the Absolute means precisely the diminution in divergence.

When bodies gravitate toward one another—when they evidence "affinity", so to speak, whether this be the cohesion of crystalline molecules, or the 'coming-together' of atoms of appropriate balance,—we inevitably assume some urging force, some impulsion. On our view, no external compulsion, energy or, more generally, physical power is required to produce these combinatorial phenomena. On the contrary, the original divergence (difference between the Absolute and the Zero-Atom Unit) itself created the affinity, and provided the means for manifesting it. That is, there is no other motion, energy, force, required than those which were origin-

ally stored in potential form in the Zero-Atom Unit, the unit of all relative entities.

This essential and central point may be made clearer by an analogy. Consider a wound clock. At every tick a part of the energy originally stored in the spring by its winder is released. Nothing further is required to unwind the spring beyond the energy which the winder provided and placed within the spring itself. It automatically unwinds itself by virtue of its urge to rid itself of its wound-up tension.

In analogy, the Zero-Atom Unit at creation is like the wound clock, it is stored with energy. The original creation, the original divergence created the energy as it created all the properties of the Zero-Atom Unit,—and the subsequent career of the Zero-Atom Unit, and all its "constructs" carried along with it, is the career of a drive to rid itself of this divergence, and with it, of the inherent energy.

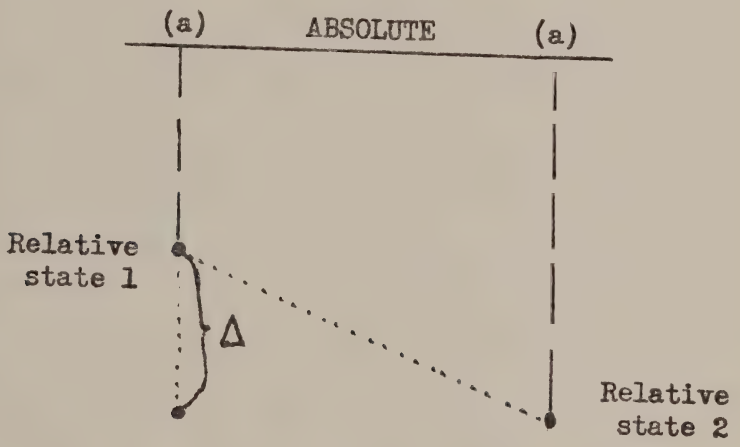
Entities, or more generally, relative states draw together, combine because of their common urge or striving to rid themselves of their inherent energy,—their divergence from the Absolute.

It is in this sense that the entire activity and processional character of the relative world is the release of energy, the degradation of energy by the transition of energy from one form to another. To put it differently, the nature of the Zero-Atom Unit as energy-divergence striving for reduction of this energy-divergence, is the source of all the activity in the relative world—this is that we call the influence and effect of *Major Polarity.*

In the world, as it is experienced, on the 'map' with which we are concerned, disparate states of relative

existence differ in the degree of their divergence from the Absolute. Thus one diamond is said to contain more "imperfections" than another; one organism is "healthier" than another, and so on.

This difference in divergence between two *relative* existents we call *Minor Polarity*. The relation and status of these terms may be given diagrammatically as follows:



1. 'Distance' between 1 and the Absolute is the degree of divergence of 1, and similarly for 2.
2. '△' is the difference in divergence between 1 and 2.
3. Urge from 1 and 2 toward Absolute, (along 1ā) and (2ā) is *Major Polarity*.
4. Tension "along the line", [(1-2)], is what we designate as *Minor Polarity*—a polar tension between any two disparate relative entities, the more divergent manifesting a tension or urge toward the less divergent.

It is the Minor Polarity that causes two or more Zero-Atom Units to form the combinatorial complex which we recognize as an atomic structure; two or more atoms to cohere into molecules; two or more molecules to form the combinatorial complex of chemical compounds.

In their original state, Zero-Atom Units are all alike;—identical save for numerosity. Maximally divergent of all relative existents, certain of them achieve a reduction of divergence[25], an initiating Minor Polarity.

It is this disequilibrium, this tension, that causes two Zero-Atom Units to unite in the formation of the nucleus of hydrogen.

Before any two disparate Zero-Atom Units unite, or combine, they are foci of *free energy*[26]. In the building-up process, the formation of combinatorial complexes of these units, their original free energy is converted into *bound energy*[27], comprising mass and the physical sense of energy.

The hydrogen nucleus thus formed, due to the fact that as a formation of a combinatorial complex it has been accompanied by a conversion of free into bound energy, is *less* divergent than the initiating Zero-Atom Units themselves. Consequently there is again a Minor Polarity established between the hydrogen nucleus and another Zero-Atom Unit to form that complex we call the hydrogen atom.

In a similar way the entire atomic series is constructed, brought into being; and in essentially similar fashion, the entire multitude of states of relative existence which constitute the Relative World.

With each step of accretion along the atomic series, more and more of the free energy of the Zero-Atom

Units which go to make up the atoms is transformed into bound energy, until when we reach the uranium atom, we have, simultaneously, the greatest atomic mass and the least available free energy. That is to say that as we go up the scale of atomic weights we are also going along a scale of diminishing divergence.

The formation of atomic, molecular, and macroscopic orders of relative existence is thus seen as fundamentally the activity, translated into varied forms, of the basic striving of the Zero-Atom Unit towards its goal, the Absolute. It is this striving which brings into existence the familiar, variegated and multiform Relative world in which we live. This world process is, as we have said, "atomistic" in the sense that it is an enormous conglomeration of combinatorial complexes of fundamental, indivisible, unit building blocks—the Zero-Atom Units. It is a tremendous dynamism, in that this entire structure is the unfolding of the potentialities inherent in the Zero-Atom Unit through combinatorial activity resulting from the intrinsic telic character of the Zero-Atom Unit—its permanent striving toward the Absolute.

The Zero-Atom Unit is, thus, the ultimate divergent of relative existence and in its role as building block is also the "unit of Polarity"; it is, so to speak, the "carrier" of the influence of the Absolute throughout the Relative. For the polarization of the entire domain of the relative with the Absolute is effected *via* the Major Polarity coupling the Zero-Atom Unit with the Absolute. Through this original polarization, "all the progeny" of the Zero-Atom Unit are also polarized with the Absolute.

n.b. There is a difference to which we may call

attention. Every Zero-Atom Unit is polarized with the Absolute directly. But combinations of Zero-Atom Units are, as entities, polarized with the Absolute *only* through the Zero-Atom Units which compose them. It is in this way that the Zero-Atom Unit is the "bridge" over which the influence of the Absolute is made manifest in the Relative World; over this bridge passes the Absolute's influence of order, of which we shall shortly speak.

In a sense, it is this "bridge of Polarity" which enables the Relative to be ever reminiscent of the Absolute, for over this bridge there pass into the relative domain the intimations of Absolute essence with which the Relative is endowed; the partial and fragmentary glimpse of the Absolute which the Relative affords.

For all manifestations of Life, Mind, Consciousness, etc., are introduced into the relative world as properties of the Zero-Atom Unit; inherent potentialities which the influence of the Absolute, its "tension" relationship with every Zero-Atom Unit actualizes in the course of the strivings of the Zero-Atom Unit toward the Absolute. By this process alone do these appear in the world, evolved in the course of the career of the Zero-Atom Unit.

We have already noted[28] that the Zero-Atom Unit carries as primary properties Life, Mind, Consciousness; these are persistent traits in the constituent units of all relative existents.

Mind, Life and Consciousness, in the relative sense, are then as intrinsically 'natural', part of nature as is a stone or a star in its special position within a galaxy. In this view, A-R theory rejects again and on still

another count, both the static idealisms which hearken back to Plato, as well as the materialistic-mechanisms whose static atomism we have already rejected; and both are rejected on the score of their complete estrangement of Mind and Consciousness from the course of nature; the representation of Mind and Consiousness as something unique and problematic—either above and superior to nature, as in the Idealistic synthesis, or sunken and lost in the material inertness of a thoroughgoing materialistic world.

Opposed to this is our own view of Mind as essentially part of nature; not a 'something' essentially extraneous to nature, to relative existence, but rather as something, pervasive and unobservable throughout the largest reaches of relative existence, emerging as an observable pattern of relative activity at a certain level in the evolving structure of the relative; an evolution identical with the combinatorial complexes which mark the movement and dynamicity of the striving of Zero-Atom Units toward the Absolute.

Mind and consciousness are activity-patterns; which as unobservable, pervade the Relative. At a certain point in the development of relative existents, this pattern becomes observable and at this point mind-states become observable members of the relative world.

We term this behavior as included within the continuity of combinatorial activity which marks the teleological career of the Zero-Atom Unit on its way to the Absolute. Thus, in the Zero-Atom Unit *per se,* mind, as well as all other primaries are, strictly, not observables. As the combinatorial process continues in its direction of diminishing divergence, that pattern of activity—Mind—comes closer and closer to the level of

observable relative existence.

That point of divergence in which mind first appears as an observable, the "nodal" point so to speak, divides the relative into two domains, continuous the one with the other nonetheless. These two are the 'psychic', in which Mind is observable; and the 'non-psychic' in which Mind is not yet observable relative existence. It thus appears as a stage, a level in the development of relative existents which begins with the initially divergent Zero-Atom Unit.

This very nodal point, and the associated mind-activity enables us to enrich our conception of divergence, recursively, so to speak. For we may now order our differing divergences along the scale of the appearance, or emergence of mind as a relative observable.

Thus of two relative entities, x and y, that one is the less divergent, which more closely approximates the condition of Mind as observable; this is the scale of divergence in its deepest developmental sense; this is the sense in which the plant is *less* divergent than the stone, the animal less than the plant, and the human less than the animal. It is in this gradual developmental evocation of Mind in the course of its combinatorial career that the Zero-Atom Unit diminishes the divergence of relative existences—bringing out more fully Mind, Life, Consciousness, (in the relative sense) and thus, more closely approximating the Absolute which *IS* Mind, Life and Consciousness; and even more significantly, self determinateness. Thus we note, as we proceed along the scale of diminishing divergence, a corresponding increase of self determination, and, in a sense, this property of self-determination is a kind of hallmark of divergence. Of two relative entities, that

one which is *more* self-determined is the *less* divergent. Thus the divergence of man is *less* than the divergence of the Earth in precisely the sense that the self-determination of man is *greater* than the self-determination of the Earth; man can elect his path; the Earth's path is fixed by structures which the Earth cannot alter.

Concomitantly, as we approach this 'nodal point', from "below", so to speak, our approach upon the Absolute, which is self-determined, brings with it an increase in self-determination; although below this node, it remains an unobservable. At the node, it breaks through, as it were, and with the emergence of Mind, as an observable, there also concomitantly emerges self-determination as an observable.

It further follows that this entire domain of Mind, "above" the nodal point, constitutes a realm within the relative of *lesser* divergence than the non-mental realm.

This then is the character and status of the metaphysical force, Polarity; the fundamental demiurgos, the basic causative tension which produces the multitudinous combinatorial complexes, which, actualizing the immanent traits of the Zero-Atom Unit, constructs the relative world in all its dynamism and activity—the vast procession of relative existence 'upward' toward the Absolute, culminating in man, the least divergent of all relative existents, and it is to him that we now turn in more detail.

CHAPTER FIVE

ORDER

THAT THE world of nature is characterized by a pervasive orderliness has been one of the earliest recognitions of philosophic thought.

The ancient hymns of Vedantic tradition give praise to the *ritam* (harmony, rhythm) of the universe. In the imagery of these ancient poems, it is this *ritam* which is the essential nature of the life and movement of the world, and the preservative force of the orderliness and regularity of the universe. Vague and poetical as is such a notion, it yet evidences recognition of the fact that the world is not a mere chaos.

More subtle and more definite are the ideas of the Greek thinkers of the 5th century before Christ; the Platonic concept of the "Spindle of Necessity", the "World-Soul" of the myth of creation of the Timaeus. In this Platonic conception the World Soul is directed and purposive intelligence seeking the ultimate end of supreme reality, the quasi-mystical and supra-rational "Form of the Good". This fundamental conception of a universe *striving* toward a condition of Supreme Reality, of a superior existence, a world forever 'on the way', finds its reflection and restatement in our own

view. For us too, the world is no mere aggregate, no mere heaping of things; but an ordered, processional stream toward an end where existence forms a reality superior to and immanent in, the very stream whose terminus it is.

It is said of Tycho Brahe that before going to his sextant to make observations on the heavenly bodies, he would clothe himself in his richest raiment—so impressed was he by the overwhelming majesty of the orderly process of the heavens. Not only the heavenly bodies follow their gyrations in stupendous regularity. Through and through, the relative world evidences order and regularity—from the astronomic paths and regularities of the heavenly bodies, to the determinate orbits of the spinning electron, there is an all-pervasive order and uniformity which underlies natural law; in a clear sense, the varied and manifold laws of nature are but specific expressions and determinate manifestations of this underlying *ritam* and order.

Like all other aspects of the relative world, this very pervasive order of the relative world displays an essential imperfection. Along with apparent order we find also disorder. Thus, for example, the electron seems to exhibit a spontaneity and indeterminacy which signalizes a certain degree of recalcitrance to order. But despite this, the universality of order is still vast and impressive, bespeaking an absolute source and origin.

How shall we designate this kind of thing, this order?

The meaning of order will become evident in terms of the following illustration. Conceive of a collection of books, a mere aggregate of books—a "heap" of

books of different colors, authors, subjects, and publication dates. If we were to propose the conversion of this rubble of books into a library we would be proposing the imposition of an *order* upon the collection. Thus, we might arrange the books in the order of publication dates, or in a determinate series of colors, or in an alphabetical arrangement of author or subject names. It is this *ordering* which takes the books from the domain of a chaotic assemblage into that of an *orderly series.*

The essential element in this orderliness is the referential character of each member of this arrangement to some other determinate member. Thus, given a book, we know its position in the library relative to other members of the library, if the books are arranged in an order. It is the absence of this determinate referential relation to other members of the collection that distinguishes the mere aggregate from the ordered collection.

It is the organization of the parts into a unity in which the multiplicity and chaos take a certain definite shape, the whole acquires balance, so to speak. To put it somewhat differently, the ordered collection differs from the unordered aggregate in that in the latter, the parts are indeterminately related to each other, whereas in the former, the different parts of the aggregate are in an integrated relationship of reference to each other. They are a chain of reference as it were. Like the difference between a motley of colors and shapes and the artistic creation; like the difference between a heap of bricks and a house; the crux of an ordered collection is to be found in the referential relationship of parts to each other in the whole.

In the relative world, we find the ground and source of the relative order external to itself. Apart from its polar bond to the Absolute, the relative world would be sheer chaos—chaos so vast and unimaginable as to defy comprehension.

The essential element of order, this referential relationship of parts to each other within an integrated unity when conceived in time, when taken over into the domain of temporal existence entails some fixity, some form of temporal persistence and stability. If, for example, the books in our previous example were in constant flux; fading and changing with no aspect of fixity, this referential relationship of order would be meaningless; that is, the very fact of order entails, as we have said, some form of structural, substantial permanence, subsistence. To put it differently, and in more specifically temporal terms, if like antecedents are not followed by like consequences, there is chaos.

And yet, permanence in the relative would seem a contradiction in terms; for, *per essentiam,* the relative is the domain of all-pervasive instability and alteration; of perpetual coming-to-be and passing away. In this sense then, order, partial and imperfect though it be throughout the relative does not and cannot inhere in the relative *as such* but must be the consequence of influence operative upon the relative of that which is itself not relative—the Absolute. Of its very intrinsic nature, the roots of order must lie in that which is not essentially changing and altering. It is the Absolute which is the Orderer and Governor of the relative world precisely as it is its creator and originator.

In its polar relationship to the relative world the

Absolute exerts its ordering influence upon the relative. In its Polarity with the Zero-Atom Unit the Absolute stands as an immanent presence in the relative, and over this bridge—the Zero-Atom Unit—the Absolute exerts its all-pervasive and constant influence upon the relative. Via this polar, meta-physical force the Absolute Order, which *is* the Absolute, draws, as it were, the entire confluence of the relative 'toward' itself. For 'Polarity', as we have seen, is that meta-physical force which "tends" the relative toward the Absolute. The relative, precisely in its tending toward the Absolute, is tending toward Absolute Order. The polar attraction of the Absolute is thus itself the influence toward order.

The order of the relative world appears thus as an *ordered order,* an order imparted to it by the Absolute through the mediative meta-physical force, Major Polarity; unlike the intrinsic inherent order of the Absolute, the order of the relative is a derivative thing.

The fundamental ordering of the Relative World; that is, the fundamental referential relationship among all things of the relative world is given in our theory by what we call the *Referent-Referend Law.*

As we have already noted, the Relative world is a vast aggregate of entities and systems of varying degrees of complexity and divergence. In the physical sense, electrons, positrons, atoms, molecules and macroscopic systems each have their own specified divergences from the Absolute. The relative components of the relative world are not all identically diverged from the Absolute; between these constituents there are differences in divergence.

Just as in the "library model" for ordering, differ-

ences in either date, or position in a color spectrum, or position in the alphabet constituted the *ordering relation,* so in the relative world, in the large, difference in divergence from the Absolute is the ordering relation fundamental to all relative orderings, partial and incomplete as they are, which pervade the relative world.

Being in different degrees divergent from the Absolute, the relative entities are ordered with respect to each other by these degrees of divergence, in a "great chain of being", so to speak.

Thus, for any two relative entities of different divergence, that one of lesser divergence stands as 'Positive' relative to that entity more divergent than itself.

Here in this ordering of the entities of the relative world is the structural source of those Minor Polarities which pervade the relative and which are the immediate causative agencies of the activity of the Relative World.

But clearly since the number of Relative entities is finite there must be a lower and an upper bound to the series. In this case the "lowest" member will be the most divergent, the Zero-Atom Unit. Thus all relative entities other than Zero-Atom Units will be 'positive', relative to the Zero-Atom Unit. Thus, a relative entity, other than the Zero-Atom Unit, can stand in a double role in this chain; positive, relative to one entity, and negative to another, depending upon the respective divergences. To put it more generally, any given relative entity of divergence, n, will be negative with respect to all relative entities whose divergence is less than n; and positive with respect to all relative entities whose divergence is greater than n.

The entire panorama of relative existence presents what might be called a vast matrix of Minor Polarities; for between any relative entity of divergence n, and all other relative entities of divergence n, there exists a vast set of Minor Polarities associated with these differences in divergence.

The various entities of the relative universe are thus seen to be linked together in these chain-like structures of Minor Polarities. And since each relative existent is bound to the Absolute through Major Polarity, the chain is seen to extend from the Absolute to the most divergent, most 'negative' element of the Relative. In these chains, each link, except the ultimate Termini, the Absolute and the Zero-Atom Units, has a double character being negative to those entities less divergent than itself and positive to those things more divergent than itself.

As we consider these vast chains extending from the Absolute through the relative world, each link save the terminal links, is both referent and referend; referent to the entity next *more* negative than itself, referend to the entity next *less* negative than itself.

Thus, the Zero-Atom Unit as the ultimate divergent and hence as the most negative existent entity constitutes the relative negative terminus of the chain and is consequently not the referent of anything; nothing is *more* negative than it. It is thus the ultimate referend, precisely as the Absolute at the other end of the chain, being an Absolute positive, and, hence, negative with respect to nothing, is the ultimate referent.

In a sense, it *is* this Referent-Referend relationship that provides the texture, the weave, so to speak, of the entire relative universe; linking its multitudinous

parts together and binding the totality to its fixed and constant base and support, the Absolute.

We may note here that the atomic series which we have considered in the above discussion, is a particularly clear instancing of this Referent-Referend relationship, the atom of each element in the series being a referend to the atom of next higher atomic number, and referent to the atom of the next smaller atomic number. Thus, the chemical elements, from hydrogen of atomic number, 1, to uranium of atomic number, 92, constitute a referent-referend sequence. But although uranium is the last member of the atomic series, it is not the terminus of the referent-referend series as a whole, for it too is a referend and has many referents.

It is significant to note that the concept of order in the relative world extends not only to the physical material order of the world but to the psychical as well; psychic phenomena too are ordered by the influence of the Absolute; and we shall consider this psychic order in detail in "Man and the World of Polarity".

But we may note here, in general, that the scope of the Referent-Referend law extends not only to the physico-material aspect of the relative universe, but to the psychical too. Thoughts, feelings, minds too form a Referent-Referend chain[29]. In this series the ultimate referend is seen to be the most 'negative' thought, feeling, etc. while the final and ultimate referent is, as in the physico-material, the Absolute; psychical and immaterial.

As we have seen in our discussions of Polarity and discussion of Bond, the point of convergence of the

Referend-Referent chain of the Relative world is the immaterial Absolute, Final Referent. The Referent-Referend relationship is, thus, evidential of the ordering influence of the Absolute in the psychical as well as the physico-material realm. Sanity and reason, the harmony of thought and emotion, are orders; and as such are no less dependent for their existence upon Absolute order than the ordered harmony of planetary regularity and uniformity.

In a clear sense, this fundamental ordering schema of the entities of the relative world underlies the more specific and detailed orders of the empirical sciences. For what are these latter but specific orderings of parts together? The mathematical biologist considers the problem of cellular growth, and *refers* this phenomenon to another—the chemical character of the environing solution; the chemist considers the problem of the combination of elements, and *refers* this phenomenon to another—the energy levels of the atom; the physicist considers the problem of the motions of bodies, and *refers* these to other motions. For the scientist, explanation consists of relating phenomena to each other in some kind of functional dependence; pressure is a function of temperature, electric field intensity is a function of current intensity. Throughout, the scientist explains A by functionally relating A to B; this is the essence of the form of physical laws: A = function (B).

But how could such relationships obtain, if things did not, in fact, exist in a referential relationship to each other; fundamental and underlying as ground for these more detailed and selected referential relationships, is the Referent-Referend relationship from whose pervasive ordering these more detailed orders derive.

Not only is this Referent-Referend law the expression of the fundamental ordering of the relative world, in a somewhat static sense, but this ordering is a dynamic ordering. For, as we have already pointed out, this referent-referend ordering of the relative world is the structural matrix of the Minor Polarities which pervade the world. And in this matrix of minor polarities is the dynamism (and its direction) of the relative world. For the resolution of these minor polarities is, as we have seen, always in combinatorial complexes of ever diminishing divergence; of closer and closer approximation to the Absolute. That is, the striving toward the Absolute, the perpetual reduction in divergence which characterizes the relative world, is structurally "embedded" in the relationships given by the Referent-Referend law; it is the Referent-Referend relationship which expresses the Minor Polarities of the relative world, and through which the movement of the world toward the Absolute is accomplished.

Whatever orders appear in the relative world appear then as the influence of the Absolute, as partial and imperfect reflections of the Absolute Order which *is* the Absolute. There is neither atom nor electron, thought nor feeling, not part of the vast chain of divergence from the Absolute; part of the vast chain of Referent-Referend relationship binding the relative world in all its parts into a unified striving toward the Absolute as Final Cause of all the ordered process and alteration which *is* the Relative world.

CHAPTER SIX

MAN AND THE WORLD OF POLARITY

THE EXUBERANCE and joyousness of the Greek philosophic spirit of the fifth century before Christ was founded on the dominant conception of the essential and thorough-going unity of the entire world of nature.

The world of Plato and Aristotle was a unity which included man and man's spirit as an integral part. There could be no schism, no rupture between man and the rest of nature. The thoroughgoing naturalism of the fifth century saw no antagonism possible between the world of nature, the world of planetary motions, of biological growth and decay, and the spirit of man; his hopes, his wills and his purposes. These were understandable and fulfilled *only* within the integrated unity of nature. Man's spirit was, so to speak, at home in this universe; the world in which man lived was congenial to, and fulfilled the aspirations of man's spirit.

Not all ages have been able to maintain this philosophic adjustment to the world. With the growth and development of the sciences of mechanics from the earliest researches of Galileo and Kepler to the completed

scheme of the Newtonian physics, the position of the spirit of man becomes more and more an anomaly.

In many ways, it is this Newtonian scheme, and its philosophic "handmaidens", Kantianism and post-Kantianism which produced the complete departure from the Greek attitude of the fifth century. Instead of man's spirit situated within a nature of which it was an integral part, the developed dynamism of Newtonian science left a material universe strictly determined; a world which from any instantaneous state would reveal itself to the Laplacian "Infinite Intellect" in all its determinate past and future.

The philosophic 'apologies' for the Newtonian science; the empiricisms of Locke and Hume culminated in the critical idealism of Kant. And here the rupture between the spirit of man and the world, "thought" and "being" was complete. For, in Kant, the destruction of the ancient Parmenidean unity, in fact, identity of thought and existence, was accomplished—and with it, any possibility of the joyous, assured consonance of man and the universe.

For the Kantian, man possesses the possibility of self-determination. But his actions are subsumed under the category of the causality of nature.

Man, in himself, free, is helplessly given over to the blind, determined course of nature in a fashion essentially destructive of that freedom.

Here, full grown, is the contradiction with which Kant wrestles.

In many respects. nineteenth century philosophy, dominated by the same mood, had failed to reinstate man in his world, but had rather emphasized the anomaly of his spiritual situation in the course of nature;

perpetuating the failure to account for the essential character of man's mind and spirit.

With the end of the nineteenth century, the awe inspiring triumph of the mechanistic scheme seemed to have had its day—the novel discoveries of experimental physics made pressing, urgent and impossible demands upon the old mechanism. The 'expanding universe' of experimental physics disclosed new regions through whose strange vastnesses the instrumentalities of the old 'mechanism' were powerless to guide.

The growing inadequacies of the 19th century science in face of the demands of experimental science paved the way for the formulation of new conceptions, new departures from the beaten and familiar paths of the classic dynamics.

Philosophically, the decline of the 19th century mechanism paved the way for Western thought to embrace visions of the world more congenial to the spiritual nature of man.

And this, in a sense, is the intellectual heritage of Western thought of the 20th century: "Man can determine his own actions which actions, however, fall under the causality of nature". How is the self-determining nature of spiritual man to be reconciled with a determinate nature?

The problem is ours today; but in other terms and in different times, the problem has existed with no less compelling an urgency than it does for us today.

For the religious philosophies of the East the problem, in their own terms, is ancient, and the solution, an escape. The determinate and oppressive world of physical occurrence was Maya; an illusion, an unreal-

ity. Assert this, and the problem vanishes; there are no incompatibles to reconcile. There is only the program of the spirt to become aware of the unreality of the determined; of the illusory character of the structured, the rigidly formed; and in the awareness of the illusoriness of the bonds, was refuge from the torment of spirit in an alien world. In the escape, in the realization of the illusion, in the recognition of the physical as Maya, spirit finds refuge in the denial of the reality of the tormentor.

In a twofold sense, our Polar view of the totality of Being mediates between the intellectually exhausted and sensually jaded rejection of the reality of a world in any sense determined, and the essentially neurotic view of spirit and the determined world as posing an horrendous and appalling incompatibility. For in one sense, it agrees that the world of nature is determined, but it reinterprets the nature of that determination so that the irreconcilability of a self-determined spirit and a determined world of action springing from Spirit are no longer incompatible. It agrees that the world of nature is, in a sense, unreal, but not so unreal as to vanish into the Maya of the eastern mysticism.

The second, and in a way, more significant sense in which the Polar view of the world mediates is inherent in the way in which the problem posed by the post-nineteenth century philosophies is reinterpreted and reformulated within the context of this point of view; for, essentially, it is in this reinterpretation that the crux of the resolution of the difficulty lies.

Properly understood in terms of the Polar view of the world, the entire problem, bequeathed by the

changing nineteenth century science, evaporates, and the problem must be reformulated in more appropriate terms.

How, then, shall we reformulate this difficulty? We can no longer speak of man as the unqualifiedly self-determined, the "uncaused" determining his actions which in turn are "caused", fall under a causality of nature. Our view rejects the dichotomy between a domain of absolute self-determination and "uncausedness" on the one hand, and on the other a domain of causal determination within the relative world. We see rather the entire vast totality of relative existence as "causally" determined; man, galaxies, worms, and molecules, all are "causally" determined—but "causally" determined we have seen, means *"under the influence of the metaphysical force, Polarity."*

And clearly, if this division is obliterated, the Kantian problem is obliterated with it. If all of relative existence is causally determined, Polarized, then there can be no problem of one region of it, the so-called "uncaused" and self-determined, giving rise to another region, the causally determined, with which it is incompatible.

Although the Polar view of the world rejects the above problem and the dualism it entails, it recognizes that there is a real problem in all this. Simply to turn from the whole point, is to be blind to a real sense of tragedy which 'the modern' possesses in his intellectual philosophic heritage.

And here again, A-R theory relocates, so to speak, the tragic element, reinterprets the essence of that tragedy in its own terms—and in these terms, the contemporary sense of homelessness gives way to a more dig-

nified, a cleaner and somewhat less irrationalistic, a more "reasonable" tragedy—but we shall see this shortly.

The fundamental issue is not, as we have seen, between the "caused", i.e., the determined and the "uncaused", i.e., the self-determined—all of relative existence is causal in that it is through and through the working of Major Polarity, through and through the metaphysical influence of the Absolute being exerted upon the relative.

How then does A-R Theory see the real issue?

The crux of A-R Theory's reformulation of the problem lies in the 'nodal point' of relative existence—that point at which Mind emerges as an observable within the relative domain. For where Mind emerges, there the inevitable process of Polarity, its unswerving uni-directionality is ruptured.

Out of the structure of his mind, man is able to transcend the determinism of the world of physico-mechanical relativity. Man's actions, certainly in part, are determined by his volition—his conscious choice and decision; he elects certain behaviors—and this election, this choice of pattern of behavior is a psychical phenomenon which is itself not uni-directionally determined by Polarity. This power of choice, this capacity to elect certain patterns of behavior by choice constitutes the "freedom of will". It is essentially this power of self-determination, to a degree attained by the human entity, which is his most significant differentium —this is what most significantly sets him off from the rest of the totality of relative existents.

We have already noted that self-determination and divergence are in an inverse relation to each other. As the former increases, the latter decreases.

In man this power of self-determination is the maximum in the relative world. Man is thus the least divergent of all relative existents. Man, more than any other relative existent, is capable of determining his own actions, his, to the highest extent, is the ability to elect and choose his actions, his processes, not completely, but more than any other relative entity. For although man is incapable of arresting the physical process of his existence, yet, unlike stars, planets, atoms or electrons, he has it as part of his psychical power in some extent to resist and nullify the natural order. He has the option of conforming to, or opposing this order. Man's freedom is a freedom in part to refute, to rebel, to ignore the order of the universe. Man is free to sin, as well as to do good.

Because of this freedom, man can, in some measure, determine the state of his own divergence—his freedom empowers him over his thoughts, and these in turn empower and direct his overt activities.

On a superficial and obvious level, this is clear enough. Man, through the agency of his "component" ZAU's, is constantly, in varied extent, participating in and conceiving of the excellence of the Absolute. Man, admittedly, is unable to achieve a perfect and complete participation and conception of the Absolute—since he is himself Relative and imperfect.

But with all the imperfection which attends man's conception of the Absolute, the image is sufficiently clear and compelling to enable it to act as guiding star for Man's strivings.

With the same appearance of the Mind that is able imperfectly to conceive the Absolute, there appears that power to resist and nullify the Polar process; that

power which makes it possible for man to reject in part the influence, the attraction of the Absolute. Man can diminish his proximity to the Absolute, can be more imperfect than he is; less unitary, less ordered than he is; he can allow disease to overcome him; he can take his life and so on. Man is not irresistibly drawn toward the Absolute—he can revert, he can "fall away from Grace".

This is, however, not distinctively his tragedy—this is merely the consequence of the existence of alternative goals for volition. The tragedy appears when we consider man's striving *toward* the Absolute—his efforts toward the good.

An example will this bring out more clearly.

I decide upon a program of helping the underprivileged, I select this decision. So far I am operative within the *least* divergent order of relative existence—mind-states. But to fulfill this *idea,* to transform it into action, into alterations within the world, I must also evoke (and invoke) mechanical processes—neuro-muscular activities of motion and displacement—and these are, inevitably of an order of relative existence *more* divergent than the mind-states which generated them; the conditions of action within the relative domain are all states of existence of greater divergence than that of the psychical states which generate these more divergent physico-mechanical, neuro-muscular states.

In these terms, the difficulty now somewhat altered, reappears—in the sense that to the extent that the psychical, the 'mental', the least divergent effects itself in overt, observable behaviors in the relative, it is inevitably commited to do so in terms of the *more* divergent, the less perfect, the less complete; it is impossible

to avoid this inevitable generation of states of greater divergence than itself. Only by total abstinence from the physical, can this inevitable "falling away" be avoided; once out of the realm of the completely subjective, the purely spiritual states of mind, the spiritual man is doomed to the evocation of the *more* divergent.

Translated into ethical terms, this means that the "better", in this context must inevitably give rise to the "worse".[30]

And here precisely, is the sense of A-R Theory's reformulation of the trouble. Where, in the initial terms, the shock of contradiction was metaphysical, in these terms, it is ethical—there is no metaphysical difficulty, as there is in the 'dualistic' analysis; rather is the tragedy moral or ethical. The tragic element in man's life is not that he represents a metaphysical dilemma, but that to the extent that his spiritual existence affects a real world of physical existence, it evokes states of divergence greater than its own. It is as if a fallen God were condemned forever to live like a mortal; or perhaps even more truly, it is the intrinsic sense in which "men are not Gods". It is in this sense that man's "Doom" is inescapable and tragedy is of his very essence.

And, in a sense, it is this tragedy which the tired and agedly wise philosophies of the East so acutely sense—and it is the escape from this tragedy that lies at the root of the mystical denial of the physical, material, non-spiritual world which is of the very essence of the philosophy of the East; and of most philosophies of denial. This it was, too, which lay at the root of the ascetic and flagellative philosophies of the middle ages;

the desperate and appalling realization of the intrinsic tragedy of man as an active agent in a physical, sensual world—the realization that in his activities within the framework of sensuous reality man was inevitably launched and destined to a careeer of "falling away" from Grace; or in our terms, recession from the Absolute.

And it is in A-R Theory's refusal to deny utterly, the reality of the relative, and in its insistence that it is of a *lesser* reality, that A-R Theory is mediative with respect to this mysticism.

But A-R theory refuses to reject reality in the mystical tradition, for, although in his activities in the world, man recedes from the Absolute, with respect to the spiritual states which initiate his physical activities, these recedent states are themselves on the way toward the Absolute and here lies the hope which saves man from ultimate tragedy and despair.

My decision to *do* x (the mental state of decision; of lesser divergence) giving rise to the physico-mechanical state X (of greater divergence) is not ultimately tragic, precisely because X, a part of the physico-mechanical relative world, is itself inevitably part of a pattern of Polarity which moves it forever toward the Absolute.[31]

There is, of course, a reverse side to this medal. For just as man in his most highly dedicated strivings is irremediably destined to the 'falling away' we have just described, so, conversely, in his most recedent strivings, in his most evil, in his worst strivings, he is unable *completely* to move from the Absolute.

Raskolnikov's brutal murder of the old woman, the outcome of a decision in the direction of increased di-

vergence, the outcome of a highly negative thought, nevertheless generates activities within the physico-mechanical region of the relative world—and these again are moving toward the Absolute; these are parts of the vast Polarized procession toward the Absolute.

This is the point of view which saves man from utter tragedy; this it is which makes it possible on our view to face the relative without the fearfulness and hopelessness which must lead to the rejection of reality and the subsequent escape into a Nirvana, whatever be its name. It is because of this that we have said that man's tragedy in our view, is cleaner, and more courageous—because of this "spiral" of being, heroism is possible. In this intrinsic element in the structure of the world, in this inherent Polarity, is found the key which makes man's spiritual life possible and heroic—committed to action on a plane of greater divergence, that action is not inevitably doomed to fall away from Grace, from the Absolute, but contrariwise, it is its very destiny to mount upward again toward the Absolute; and in this spiral is found the ethical hope of man's spiritual existence within the relative world.

We have already suggested the specifically ethical sense of this situation—we must now consider it in greater detail.

Ethics and morality rest on a fundamental dualism; good and evil. The problem has always been one of giving a specified sense to these crucial terms; to make clear what is, no doubt, the oldest and most fundamental of man's intuitions;—the opposing characters of good and evil.

To this problem, A-R Theory has its own distinctive

answer; its own particular specification of the meaning of this basic opposition.

As we have already noted, it is the Absolute which constitutes the locus of all values, in an absolute sense, as well as the point of reference from which all morality may be scanned. Within the region of relative existence, worth, value, etc., can only be the degree of approximation to the Absolute attained by the relative existent being evaluated. To say X is better, in any sense of value than Y, is to say that the divergence of X is less than the divergence of Y. The more closely an entity of relative state approaches to or "embodies" the Absolute, the greater is its value, the greater its worth.

But goodness, *per se,* is an Absolute quality, in that, as such, it belongs to the Absolute alone. And in any complete sense Evil as a reality is like the Augustinian "privation", the negation by the finite and relative of the Absolute. In this sense, it is evident that no relative entity can in any real, complete way, be good —nor, by the same token, can the relative be wholly bad, since its privation, its negation of the Absolute is also never complete—utter and complete evil would be non-existent.

It is this consequence which we have, from a particular facet, examined above in some detail. There we saw the most negative thought, the most divergent mental state giving rise to a return to the Absolute; and the most positive, least divergent mind-state giving rise to conditions of *greater* divergence.

These general considerations, applied to man's activities, enable us to define, simply and directly, the moral,

ethical categories of good and bad, right and wrong. Human actions (and to the extent that value inheres in the purely physico-mechanical domain, these too) are good or bad, right or wrong, according as they do or do not bring the given existent closer to the Absolute; as they do or do not increase that existent's participation in the Absolute.

If we were to locate the value-theory inherent in the Polar view of the world in terms of the more classic views, the Absolute is the Summum Bonum, the Greatest Good, the sole perfect and completely good. For while relative existents are good only as they relate to this Absolute, the Absolute is good, of itself.

The A-R view of relative 'goodness' as being given by the participation in the Absolute, is also reminiscent of the Platonic 'sharing' or 'participating' in the Ideas, and in this sense, the value-theory of our view is essentially idealistic. But our idealism is dynamic, goodness is not only an abstract realm, it is, more pertinently, the goal *and* the impetus of all relative striving toward that goal. It is *the* force which drives the relative and it is the goal of that movement.

n.b. What we have said, specifically, applies *mutatis mutandis* to every value and to every virtue, for precisely the sense in which the Absolute is the Highest Good, so also is it the Supreme Value. For all values, moral and aesthetic, are Absolute qualities—perfect, final and complete—and therefore, not to be found save by way of fragmentary participation, within the relative world.

And just as in the Platonic scheme, the greatest good is the One, so also is the Absolute, as the Sum-

mum Bonum, unitary and whole—utterly devoid of all multiplicity—within the context of Absolute existence; all values are One, identical and merged into the essential unitary being which is the Absolute. The virtues merge in Virtue; the values into Value; and these, Virtue and Value are themselves but different names or aspects for the one, self-identical Absolute Being.

Just as the light of the sun, caught in the facets of a jewel, is divided and broken up, so the Absolute essence, in being mirrored by the objects of the Relative universe, gives rise to a multitude of diverse reflections. Man's virtues are extremely numerous, but Virtue itself is one. What in human personality we know as goodness, truthfulness, honesty, and so on, are only different images of the same original. Each of this multiplicity of virtues is but a broken and distorted fragment of the whole. What we know here in partial, incomplete and fragmentary form, exists there, in the Absolute realm as a single, simple whole, which is virtue itself, goodness, truth, beauty; all, *per se, are* the Absolute.

Applying these generalized considerations to the problem of man's spirit 'interworking' with the lower more physical orders of relative existence, we are able to define simply, moral goodness and badness: Human actions are good or bad, right or wrong, according as they do or do not approach more closely to the Absolute.

In this context we see the ethical tragedy of man's spiritual life made explicit—the "doing" which the "thinking" evokes or generates, is of a level of relative existence evaluatively "worse" than the evoker, the "thought"—and also the ethical hope of man's spiritual

life in that the "doing", the "worse", as a state of relative existence which is non-spiritual, *is* under the sway of the Absolute, Major Polarity, and therefore inevitably "on the way" toward the Absolute.

* * *

Man's miseries, man's ills, to the extent that these are not accidental, result from the misuse of this freedom of choice—the deliberate selection of the worse rather than the better. My decision to help the underprivileged may result in activities of theft and murder of the richer, rather than in some legal procedure of assistance. Although the fulfillment of spiritual states necessarily commits me to a "worse" order of activity, this does not relieve me of moral and ethical responsibility—for within that *more* divergent order of relativity, I am still morally bound to the uppermost level of that order. To avoid to the greatest extent the "ills which the flesh is heir to", the spiritual must select the *least divergent* and *possible* state of physical relative activity. This is the "moral imperative" of A-R Theory's ethics.

Conversely, as the cause and root of man's miseries and ills lies in the misuse[32] of this basic freedom of will, so his "salvation" lies in the proper use of this same freedom; the minimization, through prudence and wisdom of the evils which he brings into being by his choices; the minimizations of spiritual "negativity", thoughts of hate, anger, fear, and the like, and the cultivation of thoughts and emotions of greater positivity. The life span of relative entities other than man is determined by their original divergence. But man's divergence determines only the extreme limit to which his natural life may extend under the most favorable cir-

cumstances. The "mortal evil" of man is constantly aging through the entropic character of material existence. Ultimately this process terminates the life of man, but this process is unnecessarily hastened by the negation which man confers upon himself by the misuse of his freedom to choose. By reason of this freedom, man can negate the natural order of relative existence and exceed his normal negativity.

By surrendering to relative-born negativities of the spirit—fear, hate, anger, envy and the others—he renders his body more divergent, more recalcitrant to the controlling influence of the Absolute order.

This alienation of the spirit from the guiding influence of the Absolute manifests itself in the organic and functional disorders of ill-health—the precursors of death.

n.b. Here, in fact, lie the roots of the newly discovered truths of psychosomatic medicine—the intestinal disorder, the circulatory failure, the nervous instability. No longer are these regarded merely as the intrusion of a foreign body, the failure of nerve conductivities and so on, but the causes now are seen to be resident within states of mind. Treatment consists of treatment of the mind, rather than the introduction of chemical agents; what amounts to the reduction of negativity of mind, to the decrease in the divergence of the ailing mind, as we have pointed out.

* * *

The basic duality and polarity of every human being with the Absolute, ensures the existence of a real psychical bond connecting and relating each finite cen-

ter of consciousness with every other. That all finite minds are, so to speak, open towards the Absolute, makes them accessible to each other, through Id.

It is this interconnectivity of finite minds in and through the Absolute which accounts for the existence of parapsychical phenomena: telepathy, clairvoyance, and the like. Once the intimacy of the connection of finite minds is clear, it at once becomes evident that the real problem is not the existence of these occurrences but rather their rarity—and this infrequency of occurrence is unquestionably due to man's inordinate negativity.

The complexity of societal existence, even in its most primitive form, is the source of highly negative stimulations. These, impinging on finite consciousness, produce highly negative thoughts and emotions, which, by their presence, decrease the extent to which the mind is receptive to the Absolute influence.

In greatest measure, the thoughts and emotions of modern man are negative; the relative "world is too much with us"—and so much as virtually to exclude the realm of the Absolute and with it, that aspect of the psychical, spiritual life of man which presents the individual not merely as a unique, discrete finite mind, but as a part of the continuum of all mind.

Injury and evil are thus not restricted to the individual, nor are benificence and good; "no man is an island unto himself" is profoundly true and echoed in our view—injury to oneself is also an injury to all others, and is an increase in total negativity, in "distance" from the Absolute. And in the already noted sense in which the Absolute is the goal, the final cause for man, as for the rest of relative existence the entry

upon courses of action which recede from the Absolute is an evil. The nature of right action is the "lifting" of act and actor toward the Absolute, thus rendering *less* the divergence of existence, thus rendering it less recalcitrant to Order.

Ultimately, upon the degree of man's proximity to the Absolute depends both his virtue, his worth, and his felicity. The less negative a man be, the healthier and happier he is; and conversely, the more negative, the less his health and happiness. Morality, the ethical exhortation possesses its own necessary sanctions. Rewards and punishments for vice and virtue follow intrinsically from the very nature of virtue and vice.

To act virtuously *is* to *decrease* one's negativity and thereby to increase one's happiness, while to act viciously *is* to *increase* one's negativity, and thereby to bring down upon oneself those miseries which attend negativity.

Happiness, well-being and moral status are all rendered in terms of proximity to the Absolute.

CHAPTER SEVEN

CONCLUSION

THE PHILOSOPHER'S quest is, ultimately, a quest for wisdom, and in the sterling tradition of Greek thought, the worth of wisdom is happiness.

The meaning of the term wisdom is embedded in our language—it is the 'wise" man who knows the real from the apparent, the true from the false, the permanent from the transient and evanescent. It is in this sense that finally the goal of the quest for wisdom is reality in some ultimate sense.

And this too has been the essence of our quest for understanding of the fragmentary, changing map. Here too we have sought wisdom, and in precisely the above sense. We have sought for the completion of the fragment, the part which makes real and complete the partial and illusory—the mere given.

In a sense the term illusory is bad—the map is neither shadow nor illusion—it becomes so when it is mistaken for the totality, for the entire domain of reality. The map, the Relative world is real, but it is not the whole of reality, nor is it the profoundest aspect of Reality. It is this profoundest aspect of reality which

the quest for wisdom and reality seeks, and which we have seen to be the Absolute.

It is not a thing, an object or an entity; it is not tangible, not corporeal, and not physical; not capable of being made concrete. Yet, just as truly, it is that which makes things; it is the principle of life and integration; it is the fundamental reality and actuality, although itself intangible.

In every Relative aspect, in every portion of our fragment, it is the completion, the fulfilling part which makes the fragmentary portion an intelligible order—without the completion beyond, the given fragment remains unintegrated and essentially unintelligible.

Just as all paths up the sides of a mountain meet at the peak, so all world lines converge in the Absolute; all our indices on the map fragment converge in the Absolute and in the Absolute achieve their profoundest reality. In every Relative situation, it is the Absolute which is the positive element, and because there is in every thing and in every event in the Relative world this common positive and equally omnipresent factor, the influence of the Absolute through the component Zero-Atom Unit and Major Polarity, all separate entities and occurrences are integrated into a single world. From the electron through atoms, solar systems, living organisms, organized societies, the positiveness, stability and order of the Absolute are passed along. From this titanic root, countless chains are built starting from the Absolute and extending out throughout the Universe to form an interwoven fabric which constitutes the Universe itself. Without the Absolute as fulfillment and completion, the entire structure of the given Relative instead of falling into place as a part of a processional

order, collapses into a maze of unrelated constituents. In a sense, the Absolute may be said to fulfill and complete the fragmentary Relative World as a necessary presupposition of our experience; a pre-supposition according to which we order into an intelligible whole the structure of experience. Without the Absolute, the Relative World is structurally indeterminate, without Order, chaotic.

And yet our minds are on the Map—we are on the fragment—we, and our intelligence are parts of the Relative world; and therefore this too partakes of the limitations, the imperfections and the incompleteness of the Relative World. And so our conception and our understanding of this Supreme Orderer are also partial, imperfect and incomplete; we are given only "intimations of immortality", intimations of the Absolute. Reason can point to an Absolute, can see its necessity and its inevitable status, and yet this Reason, imperfect and incomplete as are all elements of the Relative, can paint but a partial and imperfect picture of the Absolute. This is to say what has been uttered for ages: the human entity is imperfect—and this is as it should be; for imperfection is of the essence of Relative existence. Men are, after all, only men, not Gods. Within a relative finite world, nothing can achieve perfection. Admittedly man is not nor will he ever be perfect, but from that, it does not follow that he cannot be improved.

But it is an error to presume that the frailty and imperfection of the human entity are the foundational source of man's difficulties. The real trouble, the real fountainhead of the multitude of evils which afflict man lies less in the nature of the human entity than it

does in man's ignorance of his nature; man's ignorance of himself and his place in the Cosmos. "Man—know thyself" is not enough. He must know *how* to know himself.

It is from man's failure to recognize that he is a dual creature that his difficulties arise. From his failure to recognize that he is, so to speak, the battleground of opposing tendencies, arise the vast multiplicity of evils which beset him.

And just as the fragmented river, mountain and road find their fulfillment and completion, their order and intelligibility in the Absolute, so does man—also a fragment of the map—find his fulfillment and his completion in the Absolute. It is in the realization of his dependence upon the Absolute for order and stability, and his deliberate striving toward the Absolute that man's wisdom, reality and happiness lie. This striving, even when conscious, is balked on every side, opposed every moment from man's physical birth until his physical death, by the intrinsic antithesis of Relative and Absolute. This is the inner sense of his being a battleground of opposing forces. Unaware of his duality, man is the target of all that is negative. But once aware of his duality, he is also aware of the possibility of direction and aware of the goal of the striving. It is no idle phrase that man's reality, his wisdom and his happiness are in the Absolute.

The task is to discover and be aware of man's residence in two domains—the Relative and the Absolute. For just as the fragmented map is the relative, in the truest sense of existence, it exists in the completed map; and so the Relative World, as an existent, exists most truly and most significantly in its completed and

fulfilled aspect, in its Absolute aspect. And so for man, as part of the fragmented map, part of the Relative World, he, too, most truly and most profoundly exists in his Absolute aspect as a dual and polar entity, dual and polar with the Absolute.

NOTES

CHAPTER I. EXPERIENCE AND DUALITY

1. Bertrand Russell; "Mysticism and Logic", pp. 47-48.

CHAPTER II. THE ABSOLUTE

2. This argument is, in essence, again the argument of Leibniz (§ 37-38 of the *Monadology*). "And as all this detail again involves other and more detailed contingencies, each of which again has need of a similar analysis in order to find its explanation, no real advance has been made. Therefore, the sufficient or ultimate reason must needs be outside of the sequence or series of these details of contingencies, however infinite they may be. It is thus that the ultimate reason for things must be a necessary substance. . ."
3. *Why* this imperfection persists in the relative shall be seen later.
4. Not "IN the Absolute, but not identical with it"; for this would mean that the Absolute possessed parts. But, as we have already briefly noted and shall further clarify, this is impossible; the Absolute is unitary. Hence the End must *be* the Absolute.

CHAPTER III. THE ZERO-ATOM UNIT.

5. Speech at the 1873 meeting of the British Association.
6. $E = MC^2$
7. It is the *language* of "act" alone which is 'personal' or 'animistic'; no such intent is present.
8. Although we have not made explicit mention of it, it is assumed that the creation produces more than *one* Zero-Atom Unit.
9. See sequel.
10. C. P. Lagrange: "Le Principes de la Philosophie entre les Nouveaux Philosophes".
11. P. Janet: "Introduction to the Philosophy of Leibniz".
12. See next chapter.
13. The great Maxwell illustrated this point in the following way. Imagine a cabinet whose doors are forever sealed; but in each door there is a minute hole from which there extends a string:
    And imagine now, that every time we pull A *down,* B goes up; and conversely. The relations among the displacements of the strings are

the regularities with which the physical scientist is concerned; the mechanism within the cabinet is forever a mystery to the physicist. But the contents of this sealed cabinet are precisely the subject matter of the metaphysician; precisely by some explanatory device of his, can the regularity of the behavior of the strings be made cogent, comprehensible.

14. That is, the sciences.
15. Erdman: Opera Philosophica; p. 702; Lettre to R. de Montuert.
16. This is further analyzed in Ch. IV.
17. To be treated in detail in Ch. V.

CHAPTER IV. POLARITY, THE ZERO-ATOM UNIT AND THE ORDER OF RELATIVE EXISTENCE

18. J. B. Stallo: "Philosophy of Nature", p. 3.
19. We shall shortly give this term more specific meaning.
20. See "Duality" above.
21. Nor is this telic character, within the essence of the Zero-Atom Unit in potentia but is part of the actual properties of the Zero-Atom Unit.
22. Although the above argument is in terms of *a* Zero-Atom Unit, the conclusion is valid for *all* Zero-Atom Units; since we have already shown that all Zero-Atom Units are identical; see "Zero-Atom Unit", p. 38.
23. See "Zero-Atom Unit", above.
24. See "Zero-Atom Unit", p. 44.
25. By collision or otherwise.
26. It is this energy which the Zero-Atom Unit possesses as a primary property; the drive to activity of the Zero-Atom Unit due to its divergence from the Absolute. This is the source of all the power, force, activity of the Relative World.
27. Energy confined by the uniting of two or more Zero-Atom Units and appearing thenceforth as Mass and Energy.
28. See "Zero-Atom Unit"; Panpsychism.
29. We shall consider the details of this point subsequently.

CHAPTER VI. MAN AND THE WORLD OF POLARITY

30. See below; *Ethics*.
31. See "Polarity, etc." and Chap. III.
32. That is, the deliberate choice of a course leading to a state of divergence greater than necessary for the fulfillment of that mind-state.

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